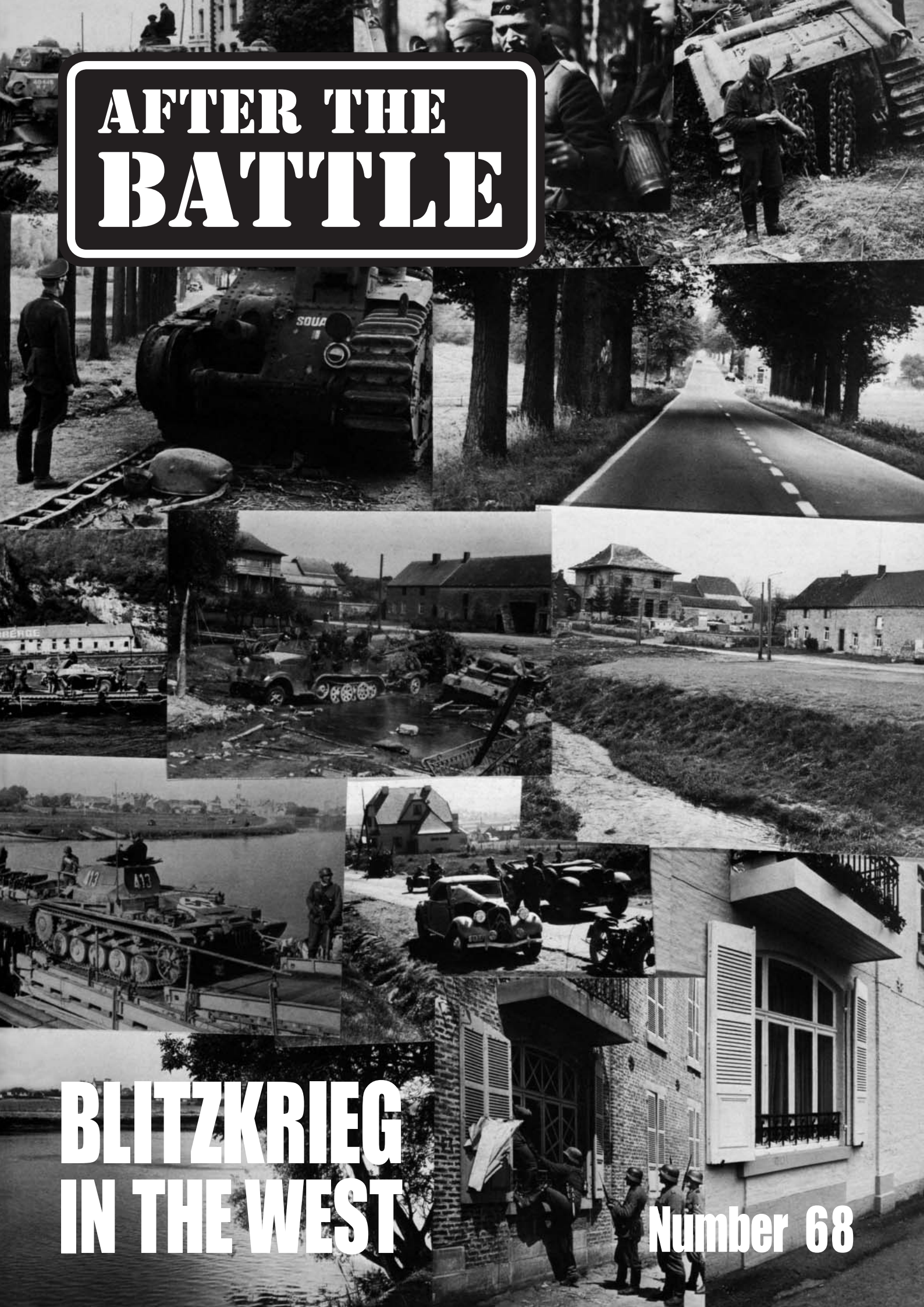




AFTER THE BATTLE

BLITZKRIEG IN THE WEST

Number 68

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Edited by Winston G. Ramsey

Published by Battle of Britain Prints
International Ltd.,
Church House, Church Street,
London E15 3JA, England
Telephone: 081-534 8833
Fax: 081-555 7567

Printed in Great Britain by
Plaistow Press Ltd., London E15 3JA

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After the Battle is published quarterly on
the 15th of February, May, August and
November.

United Kingdom Newsagent Distribution:
Seymour Press Ltd., Windsor House, 1270 London Road,
Norbury, London SW16 4DH. Telephone: 081-679 1899

United States Distribution and Subscriptions:
Bill Dean Books Ltd., P.O. Box 69, Whitestone, New
York 11357. Telephone: 1-718-359-6969

Canadian Distribution and Subscriptions:
Vanwell Publishing Ltd., 1 Northrup Crescent,
St. Catharines, Ontario, L2M 6P5.
Telephone: (416) 937 3100

Australian Distribution:
Technical Book and Magazine Company, Pty. Ltd.,
289-299 Swanston Street, Melbourne, Victoria, 3000.
Telephone: 663 3951

New Zealand Distribution:
South Pacific Books (Imports) Ltd.,
6 King Street, Grey Lynn, Auckland 2.
Telephone: 762-142

Italian Distribution:
Tuttostoria, Casella Postale 395, I-43100 Parma.
Telephone: 521 94702, Telex 532274 EDIALB I

Dutch Language Edition:
Quo Vadis, Postbus 3121, 3760 DC Soest.

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Front Cover: Blitzkrieg in the West — 50 years
ago. Jean Paul Pallud gives a foretaste of his
new book.

Centre Pages: The rusting hulk of a Japanese
freighter off the island of Morotai in the
Indonesian Moluccas. (Anton Rijdsdijk)

Back Cover: The desert cemeteries. Varying
styles of commemorating war dead at El
Alamein. The massive Ehrenhof containing
the remains of 4,200 German dead contrasts
with the rows of headstones at the Common-
wealth War Graves cemetery wherein lie
7,367 Allied Servicemen. (David M. Green)

Acknowledgements: The Editor extends his
grateful thanks to Wing Commander Keith
Hopkins, RAF (Retd.), Wing Commander
John MacBean, MBE, RAF (Retd.), and Major
Arthur Hogben, QGM, RE (Retd.), for their
assistance and advice in the preparation of
the article on RAF Bomb Disposal. Colin
Pomeroy would like to acknowledge the help
provided by LAC Michael Johnson in the
background research for his article *Wreck
Recovery* — *Wartime Style*.

ISSN: 0306 - 154X



For the last five years Jean Paul Pallud has been researching the German campaign in May and June 1940 for his second major book for *After the Battle*. The hundreds of comparison photographs to be included, the majority of which were completely devoid of captioning as to time and place when he found them, have necessitated a protracted search throughout the battlegrounds in Belgium, France, Germany, Luxembourg and the Netherlands to find the locations. In this article he gives a foretaste of the first five days of 'lightning war' in which whole countries were overrun in a way never before thought possible . . . with the silent assault of the paratroopers . . . the airborne artillery of the dive bomber, and the highly mobile spearheads of massed panzers.

In one of the largest photographic assaults on north-west Europe, the 600-odd pages of *Blitzkrieg in the West — Then and Now*, presently under production, will cover the entire campaign as never before: the relative strengths of the opposing forces and their equipment, the airborne operations, the French and Belgian fortresses, the attacks on all fronts, the advance through Luxembourg, Belgium and into France, the breakthrough to the Channel coast, the battles in the south long after the British Expeditionary Force had been evacuated . . . and on to the final defeat of the once-mighty French Army.



'Der Schritt über die Grenzen.' The march across the frontiers — portrayed here in this remarkable comparison from our forthcoming book *Blitzkrieg in the West — Then and Now* by Jean Paul Pallud.

**AFTER THE
BATTLE**
50 YEARS AGO



BLITZKRIEG IN THE WEST

By Jean Paul Pallud

Since the ending of the French 'offensive' in the Sarre (see *After the Battle* No. 66), which had followed the declaration of war in September 1939, all had been quiet on the Western Front. For eight months Britain and France had been at war with Germany but this had turned into the strange situation known to the French as the 'drôle de guerre', a queer kind of war, a 'Bore War' to the British or the 'Sitzkrieg' to the Germans. In the meantime, however, the Germans were developing their plan of attack, 'Fall Gelb', while the Allies finalised their own response to a German offensive in 'Plan Dyle'. By the beginning of May 1940, after eight months of anxious waiting, false alarms and a war of nerves, everything was now ready. Nothing would stop Hitler. The order: 'Fall Gelb, 10.5.40, 5.35 Uhr' went out during the afternoon on May 9 and the final 'Go!' signal arrived that evening.

MAY 10: BLITZKRIEG!

As darkness was lifting on a mild and light May 10, the Luftwaffe dropped out of the sky in a general attack on airfields, railways and key points, not only in France but also across the neutral Netherlands and Belgium which had trusted German assurances of non-aggression. At 5.35 a.m. (German time) the Wehrmacht crossed the borders of the Netherlands, Belgium and the Grand Duchy of Luxembourg and, at first light, airborne commandos of Sturmabteilung Koch arrived by surprise over Belgium in gliders and captured two vital bridges over the Albert Canal just west of Maastricht. Another commando unit landed on the top of the Belgian fortress at Eben-Emael, then one of the strongest fortified positions in the world, and completely incapacitated it within a few hours (see *After the Battle* No. 5).

In the Netherlands, a whole paratroop division — the 7. Flieger-Division — was dropped right into the heart of the Dutch defence positions of Vesting Holland (Fortress Holland) with the task of capturing vital bridges between Mordijk and Rotterdam and the control of airfields at Rotterdam and near The Hague.

In Luxembourg, save for some time lost in crossing the Our river on the border with Germany, and then passing through obstructions just behind, the panzers of Gruppe von Kleist crossed the Grand Duchy without



Top: This PzKpfw II Ausf. A from Panzer-Brigade 4 of 10. Panzer-Division is pictured advancing out of the bridgehead at Wadelincourt, just south of Sedan where the Meuse was breached on May 15. The breakthrough into France had now been achieved. *Above:* Jean Paul succeeded in finding the exact spot near the Bois de la Marfée overlooking the Meuse valley.



difficulty, almost in parade-like fashion, and within three hours or so, had reached the frontier with Belgium.

The Allied Command reacted cautiously in their implementation of 'Plan Dyle', waiting for confirmation that the Belgian Government had officially requested Allied intervention before actually issuing 'Alerte 4', the order for entry into Belgium. Thus it was not until about 8.00 a.m. (German time) that the first Allied troops crossed the border, two and a half hours after the German invasion had begun.

The French and British armies were now advancing to a defensive front running from Antwerp in the north to Sedan in the south. From Sedan to Namur the line followed the Meuse river but between the Meuse and the River Dyle at Wavre lay the vulnerable Gembloux gap, across which the Belgians had strung an incomplete line of anti-tank obstacles. Thereafter the defences followed the Dyle from Wavre to Louvain and from there behind canalised rivers to Antwerp and the sea.

Blitzkrieg in the Ardennes . . . but where? Perseverance led to the identification of this uncaptioned picture of PzKpfw IIs as having been taken in the little hamlet of Forge-à-l'Aple, 10 kilometres from Hotton. Having established the location, the column can be identified as belonging to 5. Panzer-Division. Picture taken on May 12, 1940.

MAY 11: PANZERS IN THE ARDENNES

By now 'Plan Dyle' was in full swing. The cavalry forces whose mission it was to hold up the Germans for the several days necessary to permit the main forces to reach the planned line, and establish a solid defence line behind it, had rushed eastwards as planned. In the Gembloux gap, where the Allied Command anticipated the main German assault, the French Corps de Cavalerie reached its advanced line in front of the French 1ère Armée in good time. Further south, in the Ardennes, the cavalry units proceeding the French 9ème Armée clashed unexpectedly with strong German units on the morning of May 11, far earlier than anticipated, and were ordered back behind the Meuse. These were the vanguards of Gruppe von Kleist, pushing westwards

across Belgium, the panzers soon reaching Bertrix before turning south towards Sedan. By the end of the second day as dusk was falling they reached the Semois river.

The entire front from Holland to Alsace was now aflame. Though in many places the attacks were merely feints, the names Rotterdam and Maastricht were monopolising the communiqués, and the Allied Command failed to appreciate that the real threat was on the 'secondary' front which the French had already ruled out as 'impassable'. While the French were waiting for the main blow to come out of the Gembloux gap, the true danger was creeping, as yet undetected for what it was, through the Ardennes. The headlong rush of the Allied armies into northern Belgium was precisely what the Germans wanted, so that as much as possible of the French armies could be trapped there.





The main river obstacle in the approach to the frontier between Belgium and France was the Meuse, on more or less a north-south axis, and the Semois running east-west. Left: Here



Generaloberst Heinz Guderian, commanding the XIX. Armee-Korps, watches engineers working on a trestle bridge across the Semois at Bouillon.

MAY 12: GUDERIAN CROSSES THE SEMOIS

So far the German airborne assault in the Netherlands was not a outright success as the Dutch had defeated the northern part of the attack in The Hague sector and recaptured the three airfields assaulted by the German airborne troops. Things were rather different in the south, though, where paratroopers had taken all the vital bridges on their list, including those right in the heart of Rotterdam. They also controlled Waalhaven airfield where their Junkers Ju 52s were bringing forward more and more men and equipment. Late in the evening, the leaders of the ground troops had reached Moerdijk and linked up with the paratroopers. It was then that the Dutch Command realised that the battle was effectively lost.

Meanwhile in Belgium the main forces

were now in contact and in the Gembloux gap the Corps de Cavalerie battled throughout the afternoon against the panzers of XVI. Armeekorps, the latter strongly supported by the Luftwaffe.

Far less noisily, the armour of the 5. Panzer and 7. Panzer-Divisions was pushing through the Ardennes although the leaders reached the Meuse near Dinant only to see the bridges blown right under their noses. Further to the south, the 1. Panzer-Division had found a ford across the Semois at Bouillon, some fifty metres downstream from the destroyed bridge, and had soon crossed the river. The 2. Panzer-Division did the same to the west at Vresse, and the 10. Panzer-Division over to the east at Herbeumont. By evening on Day Three, the leaders of Generaloberst Guderian's three panzer divisions burst into France and

approached Sedan about 8.00 p.m. only to find that all the bridges across the Meuse had been destroyed.

The French Command, which had at last realised that something was afoot in the Ardennes, was, according to Air Marshal Barratt commanding the RAF in France, still 'not yet able to decide which of the two thrusts [was] the main attack'. They were soon to find out. The feint in the north having now succeeded, the VIII. Fliegerkorps — the Luftwaffe tactical command which had under its control six of the nine existing Stuka groups — was transferred from Luftflotte 2 (under which the Stukas had operated in the Netherlands and Gembloux sectors) to Luftflotte 3. The dive-bombers were now ready to support the panzers for their crossing of the Meuse and the follow-up advance to the west.



A few hundred metres along the bank, the water proved shallow enough for panzers to ford their way across.



MAY 13: ROMMEL OVER THE MEUSE

The battle continued in the Gembloux gap and what was to be the biggest tank battle of the campaign raged throughout the day. The Corps de Cavalerie held its ground but to the south at Sedan disaster struck. To the surprise of the French Command, who thought that the Germans would not be able to launch an attack for several days until heavy artillery and ammunition had been brought forward, the move to force the Meuse was launched on the morning of May 13. For five hours the Luftwaffe attacked the French positions along the bank of the river and at about 3.00 p.m. the first assault boats were launched. Guderian himself crossed with the second wave and by 5.30 p.m. the bridgehead at Glaire was firm enough for the engineers to begin the construction of a pontoon bridge.

In the Dinant sector, in spite of the lack of support from the Stukas, things had gone equally well and both the 5. Panzer-Division and 7. Panzer-Division had succeeded in crossing the Meuse, the former at Houx and the latter at Bouvignes.

MAY 14: DEFEAT ON THE MEUSE

On the previous evening the French Command finally understood the gravity of the situation in the Ardennes and had decided to commit every available bomber to attack the bridgeheads. At first light on May 14, Battles of the RAF attacked at Sedan, being followed by Bréguet 693s, LeO 451s and Amiot 143s of the French Air Force. More Battles and Blenheims came in during the afternoon. The losses were appalling but the raids, though a nuisance, did not stop the German engineers getting on with their bridges and by evening all three of Guderian's panzer divisions had a pontoon bridge in service near Sedan while Rommel had his own at Bouvignes near Dinant. The Germans were

Breakthrough at Sedan. Three pontoon bridges were thrown across the Meuse at Sedan. This is the one at Donchery. In this picture an SdKfz 7 prime-mover has been unhitched from the 8.8cm Flak 18 it was towing which is being manhandled across separately to avoid over-stressing the bridge.

now able to move more and more men and equipment across the river and the French proved unable to comply with the urgent 9ème Armée order stressing that it was 'crucial that any German elements which had set foot on the left bank of the Meuse be immediately destroyed or thrown back into the river'. Within four days the vital French defences on the Meuse had been well and truly broken.

The situation in the Netherlands was also desperate. In the afternoon Rotterdam had

been badly bombed and the leaders of 9. Panzer-Division, which had joined up with the paratroops, had crossed the Maas (as the Meuse is called by the Dutch) and advanced northwards. The Dutch Commander-in-Chief, Generaal H. G. Winkelman, decided to surrender and at 4.50 p.m. he sent out instructions to that effect. The Armistice was signed the following morning at Rijsoord: 'Blitzkrieg' in the west was now a reality, the Netherlands having been knocked out of the war in less than one week.





Fifty years ago, as the panzers rolled westwards to the Channel, the detritus of war lay scattered across the roads and streets of Belgium and France.

MAY 15: BREAKOUT IS ACHIEVED

The breakout was now spreading along the Meuse and the panzers were pressing westwards out of their bridgeheads at Dinant, Monthermé and Sedan. Very soon, on the southern flank of the 9ème Armée, there was not even a front left as the panzers rolled on through what was virtually a defence vacuum, racing westwards unopposed.

Alarming reports were now reaching Paris where the French Command was informed that 'the 9ème Armée is in a very critical situation, its whole front pushed back'. The French Prime Minister, Paul Reynaud, tele-

phoned his opposite number in Britain, Winston Churchill, to announce that the counter-attack at Sedan had failed, that 'the road to Paris was open' and that 'the battle was lost'. Early that afternoon, the commander of the 9ème Armée, Général André Corap, was dismissed, his name a byword for the catastrophe on the Meuse.

Though the end of the campaign and the defeat of France was still more than five weeks away, 'Fall Gelb' had succeeded in a mere five days as nothing could now stop the panzers. The 9ème Armée would disappear on May 19 and its new commander, Général Henri Giraud, would be captured. The

panzers would reach the sea on May 20, and on May 28 the Belgians would capitulate.

By the beginning of June most of the British Expeditionary Force would have escaped the trap at Dunkirk, a 'miracle of deliverance' in Churchill's words, but nevertheless 'a colossal military disaster' which stunned France and left her feeling isolated in face of a seemingly invincible Germany. After losing the Netherlands and Belgium, the evacuation from Dunkirk meant that France had virtually lost Britain as an ally too. In three weeks the campaign was over and France defeated.



Soon it would all be over, the scale of the German victory magnified by the size of the Allied defeat with 27,000 German dead against French, Belgian, Dutch and British of over 100,000.

AFTER THE BATTLE

WRECK RECOVERY



'WRECK' RECOVERY – WARTIME STYLE

By Colin A. Pomeroy

Early on the morning of April 23, 1941, a Whitley Mk V, T4321, bearing the identification letters WL-P, took off from RAF Wick's runway 09 and headed northwards up the coast of Caithness towards the Pentland Firth. It was a particularly clear day; a roaring easterly wind was blowing, and the mountains of Sutherland stood out magnificently behind the port wing tip.

At the maritime patrol aircraft's controls was Wing Commander John 'Winkie' Wallis, the Officer Commanding No. 612 (County of Aberdeen) Squadron. Beside him sat Flying Officer Bob Hatchwell, and dotted around the crowded fuselage were Pilot Officer Henson and Sergeants George Archer, William Foots and A. Mathers. None of these

was a navigator: Sergeant Arthur Stone was detailed to fly in this capacity, but as the weather was so clear and the aircraft carrying extra crew members, he got off at the end of the runway and returned to the Mess — missing the subsequent adventure.

The Squadron Operations Record Book (RAF Form 540) gives the reason for the flight as 'bombing practice'. This was not the case, as T4321 was to carry out trials on the radar homing beacon set up at Wick for use in conjunction with the highly secret ASV radar fitted to this particular aircraft, as a casual glance at the numerous, cumbersome aerials along the fuselage ('Sticklebacks') and under the wings would reveal.

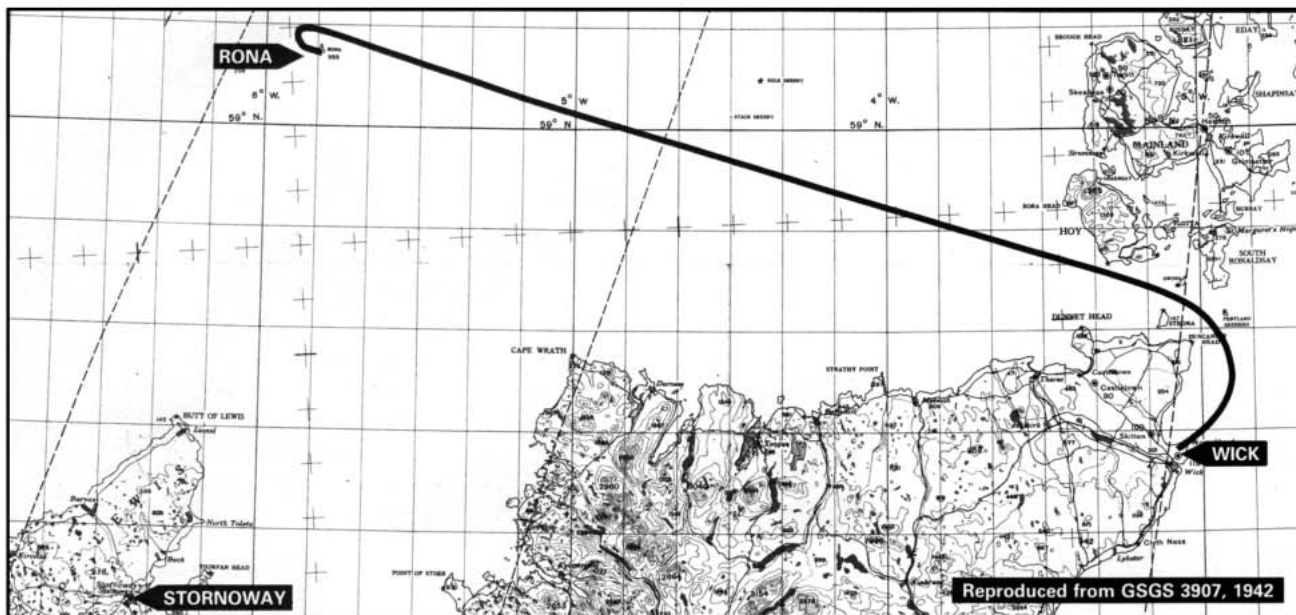
The flight continued uneventfully, over

violent seas and in the low level turbulence caused by the gale force wind. The massive naval anchorage of Scapa Flow slipped by to starboard and the airfield at Castleton to port and, in the fullness of time, the rocky outcrops of Sule and Stack Skerry were painted on the radar screen from contact gained by the sideways looking aerial arrays. Wing Commander Wallis's turning point for his run back towards the Wick radar beacon was planned to be over the remote island of North Rona, which lies about 45 miles to the north-west of Cape Wrath, and one hundred miles or so from Wick.



Top: April 1941: Whitley T4321 on North Rona prior to being dismantled. Note the ASV 'Yagi' aerial below the port wing. Offshore lies the armed trawler HMS Preston North End.
Above: September 1989: The Northern Lighthouse Board's Pole

Star lies off the southern shores of North Rona where, over 48 years earlier, the Preston North End had anchored. (Except where otherwise stated, all contemporary photographs are from No. 43 Group records via Peter Green.)



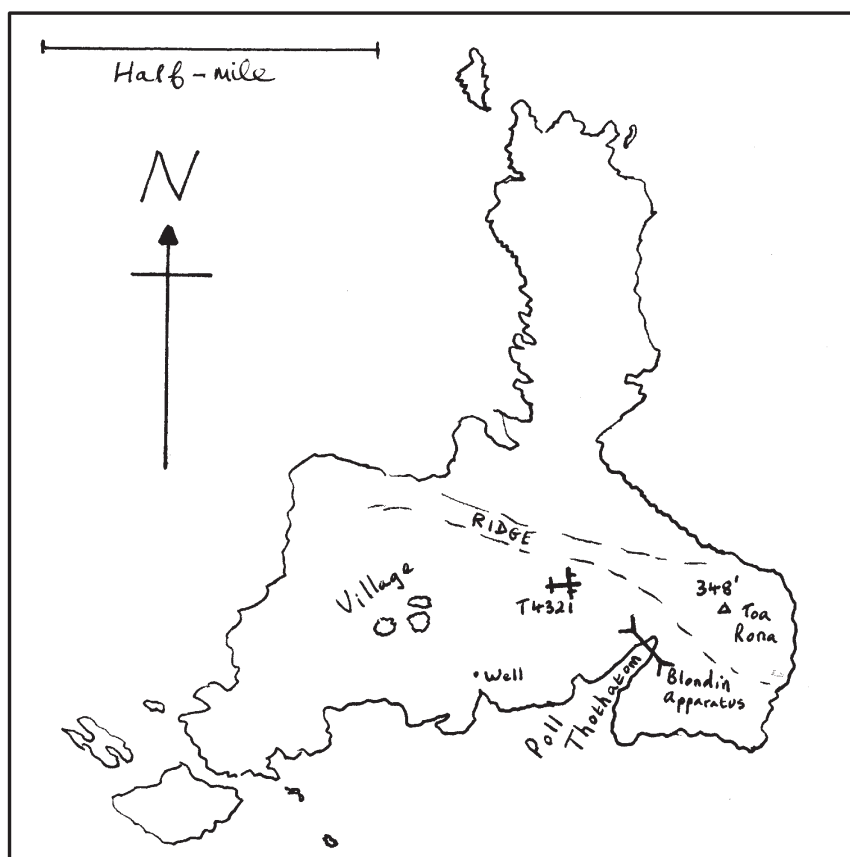
The route of the No. 612 Squadron Whitley WL-P on April 23 on its top secret ASV radar flight.

Clearly visible, like a massive whale lying in an empty sea, North Rona appeared on the nose and preparations were made for recording the trials data on the easterly run back towards the Scottish mainland. Then trouble! Flying Officer Hatchwell pointed excitedly to the underside of the port Merlin engine, where oil was gushing out from a point forward by the propeller boss. From previous experience Wallis knew that it could be caused by only one thing: a fractured oil pipe in the variable pitch mechanism, leaving only a maximum of ten minutes flying time on the engine before it seized solid. Just two months earlier he experienced the same problem on another Whitley when flying between Castleton and Wick, and in this case the engine had caught fire before being extinguished by the Gravinor bottle prior to an asymmetric landing at Wick.

Laden Whitleys of any variety were well known for their poor performance on only one engine and a Mk V with the extensive extra drag from the aerial arrays would only fly one way on a single power plant — downwards! Thus the captain had six options open to him:

1. To try to fly back to Wick in the teeth of the gale. This was, clearly not going to be possible, especially as the mountains behind Cape Wrath would preclude a short cut being taken direct to Wick.
2. To try to fly to RAF Stornoway, on the Isle of Lewis in the Hebrides. A better option than the first, but still very chancy.
3. To fly to the mainland and carry out a crash-landing. This, however, would again involve an into-wind flog, complicated by unsuitable terrain for such a landing in Scotland's remote North-West.
4. To ditch, and take to the rubber life-rafts. Again, an unrealistic option in the wild seas below the aircraft.
5. To take to parachutes, but this would be suicidal.
6. To land on North Rona itself — an island narrower than the length of Wick's main runway, with sheer cliffs and a high point of 348 feet in its south-east corner.

The Wing Commander had but a few seconds to make his decision, for, with the port engine throttled back, the aircraft was already descending from its original height of 1,500 feet. He quickly decided to force-land on North Rona. Issuing orders for the war load to be jettisoned, he called the crew to



Colin Pomeroy's sketch map of North Rona showing the crash site, old village, and Poll Thothatom. A prominent ridge runs east-west across the centre of the island, rising to nearly 350 feet at Toa Rona (where an unmanned lighthouse is now situated). T4321 lay just below the ridge, on virtually the only spot of flat ground on the whole island. The 300-acre island lies approximately 45 miles north-west of Cape Wrath and a similar distance due north of the Butt of Lewis. Even before T4321 graced its southern slopes, it boasted a fascinating history. The ruins spotted by the pilots prior to landing were the last visible signs of, arguably, a thousand years of civilisation: a church and a number of communal bothies, half-buried to minimise the effects of the cruel Atlantic wind. St Ronan is thought to have lived there, in a primitive cell, in or around the 7th century, with the chapel being built sometime during the Middle Ages. Right up to 1844 the island was inhabited by a small number of God-fearing farming folk, who strip-cultivated the land where the Whitley came to rest. In May 1884 two shepherds from Lewis, who had had a difference of opinion with their church elders, banished themselves to the island. Relatives were unable to land to check on their well-being during the winter months, and in the early spring of 1885 their bodies were found in one of the bothies.

crash-landing stations, and commenced a left-hand circuit for a landing along the island's southern slopes. The starboard engine was still performing well and, as residual power was still coming from the failed engine, it too was kept running. T4321 was manoeuvred towards the chosen touch down at which point Flying Officer Hatchwell noted that the flaps had not been selected down. He pointed out this omission to his captain who selected them to 'Full' as the western cliffs were crossed. The stricken aircraft flew past a long-abandoned village and, despite a ghastly moment when a gust of wind from behind one of the knolls raised the port wing and edged the aircraft towards the southern cliff face, came smoothly to rest in the only area of flat grazing land on the whole island. In the event, the high wind proved to be the saving grace, for the touch down ground speed was only in the region of 40 knots and the Whitley slid for just a few yards before coming to rest, relatively undamaged.

The ignition and fuel were switched off, and the crew rapidly evacuated the aircraft in case of fire or explosion. However, the smoothness of the landing ensured that nothing so frightening occurred and after five minutes or so the shaken crew returned to the aircraft to find that the W/T was still in working order. A message was sent to Wick advising the station of the crew's predicament and, in turn, Wick Operations contacted the air-sea rescue unit at Kirkwall which despatched a launch from the island of Shapinsay to the crew's rescue. With a nice touch of wartime humour, the message advising the crew of the launch's sailing was addressed to 'The A.O.C. [Air Officer Commanding] North Rona'!

Meanwhile, Wallis posted his crew members at vantage points to watch for the arrival of the ASR launch — or the possible approach of an enemy submarine, some of which were known to be operating in this area. If the latter case arose, it would be necessary to destroy the radar apparatus before a landing party came ashore.

At this time Wing Commander Wallis sported a very fierce handlebar moustache and one of his NCOs claimed that he saw one of the many seals that North Rona boasts



A base for the men of No. 63 Maintenance Unit was established in the remains of the old village about 1,000 yards from the wreck. Although North Rona was unoccupied during the war, the possibility of intervention by German forces could not be ruled out, and all the RAF personnel were armed and a constant watch maintained. Here members of the recovery and support parties engage in target practice below the ruins of the old Rona village. On the left in the rear row is Sergeant Bill Foots (a member of Wing Commander Wallis's crew) and on the right, also wearing an Irvin jacket, is Sergeant 'Big Bill' Campbell. (Photo via Michael Johnson)

draw itself up in the water, salute and say 'Good Morning, Sir!'

The rescue launch duly arrived, making the island in only four hours in an atrocious sea but at least with the wind up its stern! The crew were taken aboard, but the passage back to the mainland was not attempted until the following day when the weather conditions had moderated. A safe landfall was made at Thurso, where the Wick Station Commander, Group Captain Drew, gave the tired crew a very warm welcome.

Now the problem remained as to what to do with an only lightly damaged aircraft, secret radar gear and two valuable Merlin engines? A call for assistance went out to No. 63 Maintenance Unit (MU) at RAF Carlisle, near Glasgow.

THE RECOVERY OPERATION

The two 'gangs' of the mobile recovery party (1 officer, 6 NCOs and 20 or so airmen) detailed to travel to North Rona were under the command of Pilot Officer A. C. Davis (who was awarded the MBE for his skill and leadership during the operation), with Sergeant Desmond Waller and Sergeant Ingleby as his senior NCOs. The team travelled north to Scrabster, near Thurso, during the first week in May and, after enjoying a few beers with their new naval colleagues in a local hostelry, embarked upon the armed trawler HMS *Preston North End*. With recovery equipment and supplies loaded, they set sail at dusk for the remote island crash site.



Left: There was in fact one other occupant on the island who was discovered in this bothy near the camp where he had sought shelter. The left trouser leg of the unfortunate castaway (named 'George Rona' by the team as the body lacked any



means of identification) can be seen behind the square rock. Right: Colin Pomeroy pictured the same bothy, now with its left-hand side collapsed, although the surviving rock formation is still readily identifiable.

The passage westwards was not without incident, for the skipper, Lieutenant Keith Vasey, RNR, had been given incorrect local area charts and at one point the trawler found herself within a recently sown mine-field. It took all of Vasey's skill — and a lot of luck — for them to regain safer waters. Nevertheless, 0930 hours on the morning of May 7 saw the *Preston North End* lying in a heavy Atlantic swell off the southern coast of the island. From the pitching deck T4321 was plainly visible.

Pilot Officer Davis and Lieutenant Vasey went ashore at Poll Thothatom and climbed the slippery, but relatively low, cliffs up to the crash site for an initial survey of the task in front of them. Unloading operations continued until well into the night; the recovery apparatus was stockpiled next to the Whitley and the domestic equipment was moved across to the site of the abandoned village, where three camouflaged bell tents were erected. A kitchen area was set up in the largest of the ruined bothies and a machine gun post established, to be permanently manned — a sign of how seriously the threat of enemy interference was considered. (Additionally, each man had been issued with either a rifle or pistol, and one hundred rounds of ammunition.) The village, 1,000 yards or so away from the wreckage, was chosen as the camp site as Davis considered it less observable from sea or air than elsewhere, with the ruined walls providing some protection from the prevailing westerly winds.

Radio contact was established with the mainland and Davis sent back two initial assessments:

'To RAFMAIN CARLUKE. Re Whitley T4321. Cat B and engines may require more than shock test. Airscrews badly damaged and major damage to underside of fuselage and to flaps. Skin wrinkled badly adjacent to centre section. Port engine: C.10917/A.137579, A/S (airscrew) Rotol 5/2-1278. Stbd engine: C.10785/A.137513, A/S Rotol 5/2-1354. Landing due to failure of port engine pipe line to A/S. Eng O 612 Sqn notified. Salvage commenced . . . following establishment of bases. Lt Vasey of transport ship arranging with O&S authorities for suitable craft to transport salvaged a/c. Vasey returns Sunday with rations and will return with some parts. Weather bad at moment.'

'To Fg Off Nisbet, Eng O, 612 Sqn, Wick. Your suspicions regarding A/S pipelines



SAC Jock Thompson, standing, chats to other members of the 63 MU party. The bothy behind SAC Thompson was used as a cookhouse; that in the immediate foreground was the one in which the body of 'George Rona' was discovered. Note the two tin helmets by the bell tent entrance. (Via Michael Johnson)



Sean Twiss, on North Rona in September 1989 at the same time as the author, stands where Jock Thompson stood before Sean was even born.



Left: Duty cooks in May 1941 in the westernmost bothy. Above: The same spot in September 1989, with more recent catering tins and billy lids! (Via Michael Johnson)



A general view of the forced landing site with salvage operations in full swing. The Blondin apparatus across Poll Thothatom in the right foreground can just be picked out,

whilst in the middle distance can be seen dismantled sections of T4321 and, further up the hill, the wing root section and cockpit awaiting further dismantling.

confirmed by examination. The pipe RA1617 is located on port side of engine and you will note that when tightening the banjo union the tendency is to twist the pipe in towards the spinner, and in my opinion this has occurred on this particular engine. Both pipes RA1617 and RA1618 have been given to Flt Lt Osborne (Communications Officer) to hand over to you on his return to Wick. You will note that the union clip has also fractured as a result of chafing and that the locking strip has released the pipe sufficiently for it to make contact with the spinner. Brass mesh also broken.'

The main task of Davis's party was to recover the radar gear — always referred to as 'special equipment' — any pyros in the aircraft, and the two Merlins. However, it was now decided to attempt the retrieval of the whole aircraft. The recovery party spent all of May 8 stripping the aircraft of the radar which, together with the pyros and aircrew pipelines, were sent back to the mainland when the *Preston North End* set sail at 2300 hours that night.

It took just one week to dismantle the Whitley, the major tasks being to remove the engines (using sheer legs), detach the wings and split the fuselage itself into three separate parts: the box section at the wing roots — known to Whitley aircrews as 'the tunnel'; the cockpit section, and the rear fuselage. Whilst the MU party exercised their considerable technical skills, Sergeant Bill Foots (who had been in Wallis's crew) and another 612 Squadron aircrew NCO, Sergeant 'Big Bill' Campbell, maintained a W/T link with the mainland, and gave any expert advice requested by Davis regarding the 'special equipment' and associated airdials and wiring. Corporal Taylor was in the support team as NCO i/c Armed Guard, the Operation Order (dated May 4, 41) for the recovery laying great emphasis on the need for security: 'Continuous lookout is to be maintained. The machine gun post is to be continually manned with guns loaded.' It also contained a nice domestic touch: '... if airing of bedding is resorted to, care is to be taken to

select suitable spaces to ensure against the enemy observing that the Island is occupied.'

Bad weather occasionally disrupted the visiting schedules of the *Preston North End* and her smaller consort, HMS *Mist*, an armed drifter from Scapa Flow, and when food supplies ran low one delicacy resorted to was fried seagull eggs — with a spot of Yorkshire Relish!

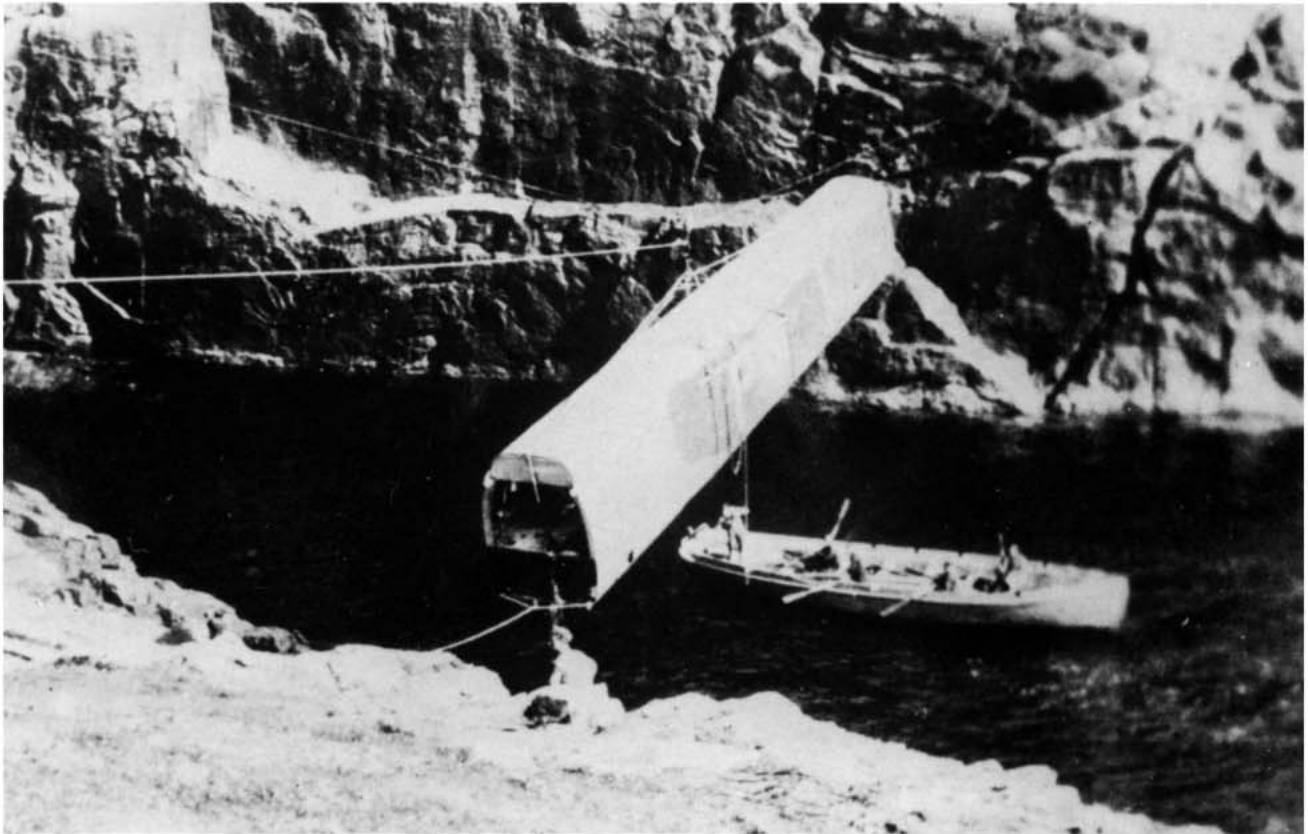
It was during the time that the Whitley was being readied for recovery that another twist to this tale occurred. Only a couple of hours after settling in to the village, LAC Michael Johnson noticed a putrid smell coming from one of the ruined bothies near the camp site and, with two colleagues, set off to investigate. There they found the semi-mummified remains of a sailor lying flat on his back with his feet at the bothy entrance. They reckoned that he had probably been dead for between two and five months. This discovery has since led to dramatic tales circulating throughout the Hebrides of a German naval officer, in full uniform, including a hat and complete with H/F radio set, being found on North Rona by the MU party, but this was not so. Nevertheless, who was this poor fellow? He was wearing navy blue cloth trousers, similar to service material, with plain straight legs and bottoms (not bell bottoms), and a jacket or coat of the same material. No buttons or badges were obvious; the jacket was buttoned up to the neck and there was no sign of a shirt or sweater. He was wearing black boots. Lieutenant Vasey made a thorough search of the body — not a pleasant task — but, with neither dog tags nor identification documents, it was impossible to put a name to the poor individual. The airmen and sailors christened him simply 'George Rona'.

Obviously he had not died immediately upon reaching North Rona's shores, for by his side lay a piece of wood, about six feet in length, with a piece of white material attached to the top, no doubt intended to be used to attract the attention of any passing boat or aircraft. Sadly, he failed so to do, and died of exposure — a lonely, marooned mariner 'known only unto God'.

The naval authorities, through Lieutenant Vasey, were informed of the discovery and at one time it was planned that the Reverend L. Macleod, a Church of Scotland minister from Lewis, would be taken to North Rona by the Navy to give the body a Christian burial. This never came about and to this day George's mortal remains probably still lie in, or near, the church by the abandoned village.

On the morning of the day when the dismantling was completed, HMS *Mist* arrived offshore at 0900 hours, again delayed by a storm. The captain, Lieutenant Blackburn RNVR, rigged his small ship's boat with stabilisers — taking the form of an outrigger on the starboard side, consisting of a 150 gallon, galvanised iron water tank lashed to cross-members made up of dan buoy spars, oars and a ladder. To port was lashed a ship's life-raft. This strange vessel was used until 2200 hours, in spite of rising wind and seas, to transport the aircrews, undercarriage units and five fuel tanks out to *Mist*. Pilot Officer Davis went on board the drifter with the last load to check the stowage arrangements and, with the weather now turned really nasty, he was forced to remain there overnight. During the hours of darkness, the curiously-rigged ship's boat broke loose and, had it not been for the arrival of the *Preston North End* late that same night, Davis would have been stranded afloat away from his detachment of men.

May 17 was lost as a working day due to continuing bad weather, but the main trans-shipment took place between the 18th to 20th. The heaviest sections, which had already been moved to the lift-off site along baulks of timber dug into trenches stretching from the crash site to above Poll Thothatom, were located below the Blondin apparatus which was in the charge of LAC Harry Brooks. The method used was first to tighten the lowering wire by means of pulley blocks between the sheer legs and the trench anchorage, leaving the wire to make an angle of approximately 20 degrees to the horizontal, and then to hoist the load by means of block and tackle on to the traversing pulley.



The load was then allowed to descend the wire, restrained by a rope passing over a bollard, until immediately over the 30-foot cutter located in the water below. Then the pulley blocks were operated to slacken the main wire as the load was positioned on the cutter.

The lightest sections, generally, were lowered first and the nose fuselage last. This precaution proved to be prudent, for the last big section broke the Blondin wire and fell on to the cutter, although only from a height of about one foot! As it was already damaged, this was of little consequence. The extremely popular Lieutenant Vasey climbed up the cliff face with a replacement hawser from his ship's store around his shoulders, and then stayed to help LACs Brooks and Johnson re-rig the Blondin apparatus for the lowering of the remaining smaller pieces. Only one item was lost — an engine oil cooler — which, despite LAC Johnson's goalkeeper-like diving effort, rolled over the cliff and was never seen again!

By 0100 hours on May 21 the recovery operation was complete. Camp was struck and the *Preston North End* and *Mist* set sail for Wick harbour, although the drifter suffered engine problems and had to put in to Stornoway en route.

A Mr Platt, the Armstrong Whitworth representative at RAF Wick, met the team on the harbourside and examined the sections of Whitley. He informed Pilot Officer Davis and his men that they were to be congratulated on a job well done. The aircraft was in remarkably good condition considering all that it had been through, although some salt spray corrosion was becoming evident on exposed rivet heads. Never before, for example, had a Whitley fuselage been split in half in the field. Platt estimated the salvaged items to have a value of not less than £12,000; even some 500 gallons of petrol had been safely brought off North Rona.

However, the story did not end there as T4321 was taken into the caring hands of Air Work Services Ltd and rebuilt. By December, she was on the charge of No. 9 MU and

The fuselage of T4321 is lowered towards the waiting lighter in the sheltered waters of Poll Thothatom. HMS *Preston North End* (419 tons) had been launched on August 16, 1934, and requisitioned by the Admiralty on September 18, 1939. She bore the pennant number 'FY230' whilst in military service, and was armed, as an anti-submarine trawler, with depth charges and one 4-inch and three 20mm guns. She was returned to her Grimsby owners, Consolidated Fisheries Ltd, at the end of 1945, and lost off Iceland on May 14, 1950. HMS *Mist* (199 tons) was launched on November 21, 1918. Armed with a 6-pdr gun, she initially carried the pennant number 'FY40', but was renumbered 'Z55' prior to assisting at North Rona. She was sold off by the Admiralty in 1946. Whitley Mk V T4321 had initially been delivered to the RAF, through No. 9 MU, in November 1940 and, as mentioned in the text, continued in use until the summer of 1944. The aircraft was finally 'struck off charge' in June 1945.

was then issued to No. 10 Operational Training Unit in August the following year. She continued to play her part in the training of crews for Coastal Command until July

1944 — over three years after her dramatic landing on the lonely outpost of North Rona. Unlike 'George Rona', the Whitley had escaped and lived to tell the tale!



Poll Thothatom pictured by Colin Pomeroy in 1989. Note the two large fissures on the cliff face which show up well in the top photograph. Today the island is home to a number of sheep and a famous nature reserve, where the relatively rare Leach's Petrel and the more common Storm Petrel breed in profusion. It is also a major breeding ground for the Grey (or Atlantic) Seal.

AFTER THE BATTLE

PRESERVATION



THE MERVILLE BATTERY – 45 YEARS LATER

By Lieutenant-Colonel M-J. P. Chilcott

The story of Merville before, during and after the battle, has been thoroughly researched by the Airborne Assault Normandy Trust and a museum, now housed within the battery, not only commemorates the exploit of the 9th Battalion The Parachute Regiment but also physically manifests its Battle Honour.

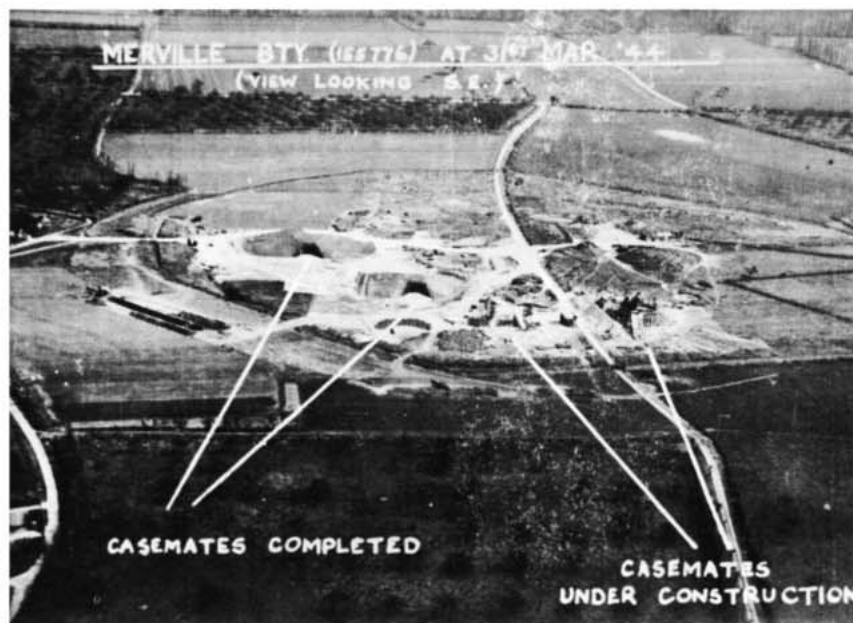
The four guns of the Merville Battery enfiladed the western flank of the Allied landings on D-Day, 1944. Less than four miles from Sword Beach, it was believed before D-Day that the guns housed within the four battery casemates were the 6-inch coastal defence variety, designed to destroy the vulnerable infantry as they waded ashore from their landing craft on the left-hand, or most easterly, of the invasion beaches. The aim of 9 Para's assault was to prevent the battery firing on Sword Beach (unknown to the Germans, of course) which its guns enfiladed from their position about a mile inland from the sea. In the words of Major-General Richard Gale, GOC 6th Airborne Division (6 AB DIV), in his instructions to Commander 3 Para Brigade: 'Your primary task is to ensure that the battery at 155776 is silenced by P-30 minutes. No other commitment must jeopardise success in this enterprise.'

Of the battalion group (about 600 all ranks) that took off, late on D-1, only some 150 arrived at the rendezvous (RV) on the western edge of the Drop Zone (DZ) bordering Varaville. The remaining soldiers fell over an area of about 60 square kilometres and many were never seen again. Few explosives and no heavy equipment arrived but, in spite of his appalling situation, Colonel Otway had no doubts about what he should do: to re-plan the assault with the fraction of the battalion around him. They attacked from the east in four assault groups, through a minefield, across open, cratered ground swept by heavy machine gun fire, into the back of the concrete casemates which they captured after a brisk fight. Of their number, about 50 were killed and 25 wounded but they took a similar toll of the

German garrison and had done their first job of the day. The survivors then marched across country to Le Plein, 3½ kilometres away, fought another battle that day alongside the commandos of the Special Service Brigade and then took up yet another position, in the Bois des Monts, during the evening of June 7. As 'stragglers' fought and found their way back to the unit, the battalion held on to this position, atop the Bavent Ridge, during another week's hard fighting before moving again to Le Mesnil, lower

down the ridge and near the 1st Canadian Parachute Battalion.

With 20/20 hindsight we can say that the Germans did not expect the Allies to land in Normandy but in the Pas de Calais, along the coast to the east. The Allies were unaware of this in 1944, busy as they were trying to convince the enemy of it; thus the position and apparent strength of the Merville Battery worried the Anglo-American planners who wondered if the Germans knew about Sword Beach. And if they did, what else did



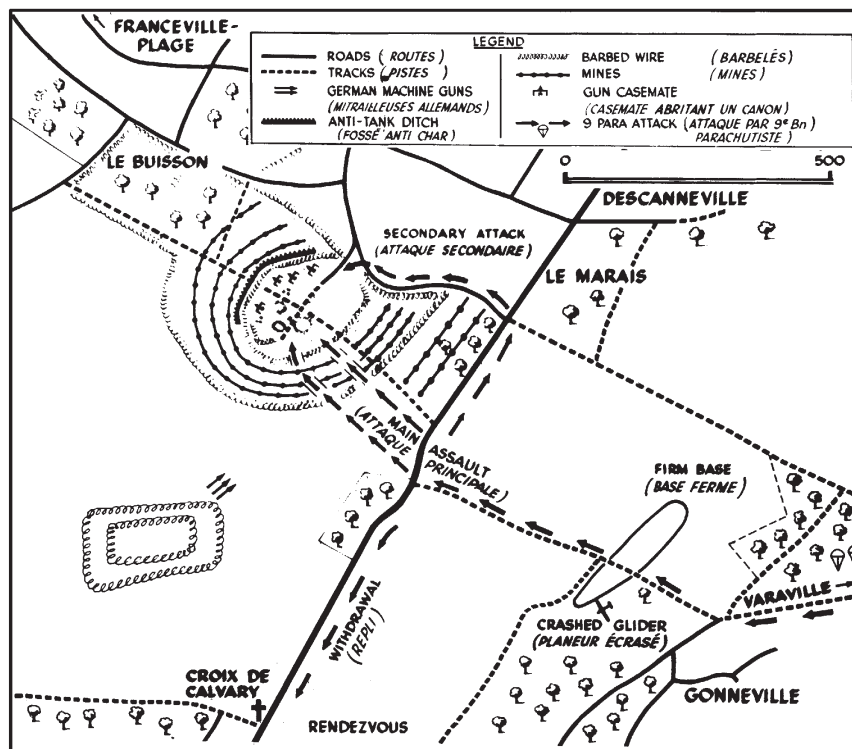
Above: Picture taken by the RAF on March 31, 1944 shows the battery under construction. The photograph at the top of the page was taken by the USAAF on D+1 by which time the area had been heavily plastered. (Reverse annotations are ours.)

they know? All military history suffers from the inability to comprehend the tensions, fears and worries felt by planners and commanders at the time in question. We can count trucks, guns, tanks, men, swords, lances and other equipment; we can measure time and distance and calculate possibilities. But we can't know the effects upon men's minds of the things they didn't know and the subtle, shifting influences of their anxieties, unless they are specifically discussed and recorded. The weight given by a commander to a factor in his plan may even be misunderstood by himself when time has passed and he, too, possesses hindsight. To the Allies in 1944, the eastern flank of the landing was vulnerable to serious interference by the enemy and had to be protected, at all costs. The assault could not be allowed to fail.

Nearly 20 years ago, Miss Françoise Gondre, of the Pegasus Café, the first building in France to be liberated during the invasion, asked General Gale to help found a Pegasus Bridge Museum to commemorate the brilliant capture of that bridge over the Orne Canal by Major John Howard and his men at 15 minutes past midnight on June 6. Having trained and prepared 6 AB DIV for the invasion and commanded it during the Normandy and subsequent campaigns, General Gale liked the concept and ordered the matter to be examined. The idea developed and led to the formation of the Airborne Assault Normandy Trust (AANT), the erection of the Pegasus Bridge Museum at Benouville, alongside the café and, later, the construction of the Merville Battery Museum. This article is about the battery today, compared with when it was at war, rather than about the battle itself.

Now, fortifications which have been allowed to return to nature don't turn into a museum at will. The first call went, therefore, to the Sappers; 61 Field Support Squadron, RE, prepared an initial reconnaissance report, and in 1981 General Sir Nigel Poett, who led 5 Para Brigade on D-Day, was promised further support from the Engineer-in-Chief. In June 1982, 10 Field Squadron RE, began work clearing out the muck and mud of nearly forty years' neglectful dairy farming, and a board showing their part in the restoration of the No. 1 Casemate now hangs inside the entrance of the museum. Drainage was improved, the central corridor floor raised, walls painted, electric light and useful circuits installed. While members of the regiment and old comrades searched for photographs, weapons, uniforms and other suitable material for display, the Royal Electrical and Mechanical Engineers, under Colonel Ian MacPherson, fitted it all in, with a model of the 6 AB DIV operational area and a larger-scale model of the attack on the battery, occupying one wall of the '9 Para Room'.

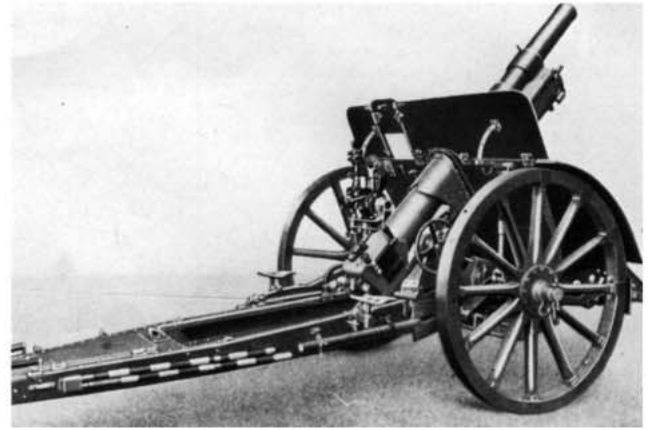
The museum is housed in the No. 1 Casemate attacked by Lieutenant Jefferson, Sergeant Bedford and a handful of NCOs and men. Many were killed or wounded along the way. Casualties covered the ground outside the entrance, according to Major Parry who led the charge. The centre of the museum is a group of three dummies dressed in German uniform 'serving' a 75mm field gun in the firing chamber. For some years there was confusion over the size of the gun, the most popular choice being the Skoda 10cm 14/19 field howitzer. The discovery and identification, just a handful of years ago, of a German artillery ammunition box in a garden nearby was evidence that they were, indeed, 10cm 14/19 field howitzers. Alan Jefferson found further confirmation when visiting the battery commander, Lieutenant Rudolf Steiner and Batterie Feldwebel Buskotte in 1985, and again when they all visited the battery itself in the company of Major Strong, REME, in 1986. About the commonest artillery field piece in Europe



Sketch map of the scene of the assault on the guns of Merville by 9th Battalion The Parachute Regiment. No buildings are marked as the map is designed to be a simple guide to the outlines of the attack. Note the German MGs in the field, due north of the battalion rendezvous, at the Calvary. One sergeant, lying wounded early in the attack, saw his men 'going through a wall of tracer' but for every tracer bullet, of course, there would have been three or four invisible ball rounds.



Model of the battery and surrounding area made by Staff Sergeant Smith, REME. The start line for the attack was the road running almost north-south to the east of the battery. The one glider (commanded by Lieutenant Hugh Pond) that landed anywhere near the battery crashed through the hedge south-east of the three white strips in the lower half of the picture and ploughed into the orchard, knocking down one of the trees. The gap left in the hedge is still visible because it was replaced by a length of fence. Most of the apple trees went a couple of years ago and it is now a caravan site.



during the '30s and '40s, the 10cm 14/19 is now unobtainable. (Until the correct ammo was obtained, we had to make do with 6-pdr British anti-tank!)

Early confusion over the size of the guns was ensured by French and American intelligence which indicated that the casemates housed 150 or 155mm guns, much bigger and more dangerous to infantry over open beaches than a field gun would be. The shell weighs about 100lbs (including its HE) and the danger area is about 300 yards across. The Germans concealed the dimensions of the entrances to the casemates so that photo-interpreters could not measure them to find that inside were field guns that could be moved out to shoot at other targets. The normal 150mm (about 6-inch) coastal guns were under naval command, of course, and were not meant to be moved from their mountings, either manually or by horses. The design of the casemate, as at Longues (see also *After the Battle No. 1*), was also quite different.

The picture reproduced here shows the battery commander, Major Wolter, in the centre. The left-hand soldier is BSM Buskotte, a fine man and soldier, who was a butcher in Osnabruck until his retirement in 1988. He saved the lives of some British PoWs by ensuring that the German soldier, into whose charge they were given, reported that he had delivered them to the proper authority in Cabourg. An officer was asked to confirm the statement. The escort, an NCO, had said he would save effort by killing them at some convenient point along the way. They owe their lives to Buskotte. The third, Hauptmann Schimpf, should have taken over the battery, but was allowed to go on 'bomb-leave' instead. Behind is the old Mairie which was used as the German Officers' Mess till the night of May 19/20, 1944, when it was destroyed by the RCAF. Eighteen people died in the bomb explosion, including Major Wolter and his French girl friend.

Generalfeldmarschall Erwin Rommel visited the battery at least once during his inspection tours of the Atlantic Wall, after he took over command of Army Group B. The picture at the top of the page opposite shows him advancing to meet the battery OC, Major Wolter. Rommel's ADC, Hauptmann Lang, has just given him the name of the battery commander from the paper in his hand. Note how he is straightening his greatcoat under his belt — a typically nervous reaction of the young officer in a new situation. This inspection was made in February or March 1944; compare the trees on the left of the photo with those on the right in the picture on this page and you will see that Rommel is on the same road but a little more to the left or north. This position is confirmed by the juxtaposition of the big telegraph pole. The roof-line on the extreme left is that of the small building next to the Mairie.

Left: A close-up of the 75mm field gun in the gun chamber. The ammunition and its boxes are the correct size for the Skoda 10cm 14/19 field howitzer of which the battery was equipped with four. We are trying to obtain a 10cm 14/19 (right) but they are difficult to come by. The dummies are almost correctly dressed. An officer would not have been there, by the gun.



The battery commander, Major Wolter, flanked by Batterie Feldwebel Buskotte (left) and Hauptmann Schimpf of the 716th Artillery Regiment. Behind them is the old Mairie, used as the Officers' Mess.



Lieutenant-Colonel Chilcott's picture of his son and daughter-in-law recreating the scene early in 1990. A bungalow now occupies the site of the Mairie destroyed by the RCAF in the pre-D-Day attacks against the Normandy defences.



At the end of 1943, Generalfeldmarschall Rommel was given the specific task of building up the Channel coast defences.

Here he is, greeted by Major Wolter, on an inspection tour of the battery some time in February/March 1944.

The picture below, taken by Stabsfeldwebel Peter Timpf while at attention, is another photo of Rommel during the same inspection; by now a retinue has gathered about him. Two officers use walking-sticks — the one seen over Rommel's left shoulder is General der Artillerie Erich Marcks, GOC LXXXIV Corps. Wolter is on the left, near the inspecting officer, as he should be, it being his unit that is under inspection. The black shape over Rommel's right shoulder is a naval officer, bending down, looking at his shoes which might be getting rather muddier than he is used to! During this inspection, the group was attacked by a Spitfire. Nearly everyone threw himself to the ground and when they arose, plastered with mud, saw that Rommel had remained standing. Case-mates Nos. 3 and 4 were still under construction; Nos. 1 and 2, immediately to the party's right, were finished.





The picture reproduced above shows Marcks atop the No. 1 Casemate, talking to Leutnant Steiner on May 23, 1944. Marcks carries the stick (he had a wooden leg) and Steiner is in the tin hat. By this time, Wolter had been dead for four days and Steiner, a newcomer, had taken command of the battery in lieu of Schimpf, then on compassionate leave. Steiner, a thoroughly professional young officer, had been wounded several times in Russia and Yugoslavia, once blinded. A German surgeon recommended an operation which he had never before undertaken, or blindness would be permanent. With nothing to lose, Steiner agreed and, fortunately for him, his sight was restored. In his concrete OP (still there, discovered by ex-Gefreiter Wuster of the battery and Major Strong in June 1989) on the beach, when 9 Para attacked, Steiner's attempts to return to the battery were hampered by a fierce battle in Franceville (between the beach and Merville). It was probably caused by paratroopers landing in the wrong place and fighting their way through the German infantry garrison, who were firing at each other.

The comparison was taken early in 1990. Both photos show the earth blown away from the concrete; the path remains today, around the crater, now filled in level with the ground. It was caused by an RAF 2,000 or 4,000lb bomb which also cracked the concrete on the edge of the roof at the corner. You cannot see the crack in the picture. Until recently, it caused a lot of trouble by allowing rain water to drip lime onto the displays inside. 10 Field Squadron RE came to the rescue again, filling it with mortar. It's very visible if you climb on the roof.

Generaloberst Friedrich Dollmann (the fat one), Commander of 7th Army, directly under Rommel, stars in the photo opposite taken during the same inspection. Several officers can be recognised in both pictures. The one on the left, behind Steiner, stands at the bend in the track; his languid stance, angle of hands behind his back and head-shape give him away. The officer behind Dollmann, with the crumpled hat and the file under his arm, is easily recognised above at the top of the crater, standing to attention. He was the 716 Artillery Regiment's techni-

Four days after the death of Major Wolter, General der Artillerie Erich Marcks, commanding LXXXIV Corps, arrived to inspect the damage from the bombing. He is standing on the roof of No. 1 Casemate talking to the new battery commander, Leutnant Steiner.



The concrete is still cracked from the near miss which removed the earth covering from the corner of this casemate which now houses the museum.

cal equipment officer — hence the bulging file. The Merville Battery was part of that regiment. The 'hawkish'-looking, lean officer to the right rear is also on the top of the casemate. He was Oberstleutnant Knupe, recently promoted to command the regiment and killed on June 7 when trying to get to the battery from Caen by the direct route. The senior officer to the right with no belt (who is believed to be Generalleutnant Wilhelm Richter, the GOC 716 Coastal Division) leads Dollmann down the crater-path.

But what has happened to Marcks? He walks immediately behind Dollmann, almost exactly covered by him. His stick is a blur between Dollmann's legs and one can see his similarly blurred left foot in front of the equipment officer. The latter could not put *two* left feet forward, even if he was very technical. Marck's hat also picks him out — it's the German field-cap.

Note also the two buildings behind the party. They can be seen in their present state in the comparison. The nearest one was described by French Resistance as having green shutters in 1944. One should also note the damage, dereliction and litter in most of the 1944 photographs — the effects of bombing. Everyone who was there says it was like a moonscape that changed with every raid. The surrounding minefield was continually being blown up or moved around by bombs. This endangered the garrison because they had to replace mines in the obstacle, unsure of where others had been thrown or whether or not they had exploded. One can still see the indentations left by craters in the surrounding fields, when the light is at the right angle. No. 3 Casemate still boasts a 4,000lb bomb in a deep hole under its entrance.

The gentleman who lives today in the nearer of the two houses is the son of the



Merville schoolteacher who taught the village children when the old school was attached to the Mairie until 1937. It was normal for a village Mairie to have the boys' and girls' primary schools built onto it on either side. This arrangement can be found in the village of Amfreville, about two miles away, next to Le Plein, 9 Para's task subsequent to the battery. The nearest house was

Taken on the same inspection tour, debris from the recent bombing lie everywhere, yet these two shattered houses still survive today beside the access road to the battery.

also the site of the machine guns which Sergeant Knight was sent to silence. The big house on the corner suffered not a scratch during the whole campaign, despite several Bomber Command raids on the battery,

during which the village was wiped out, the severe fighting and shelling which occurred there on June 6 and 7 and several bouts of shelling from HMS *Arethusa* and other ships when called for by 6 AB DIV.





Left: One of the life-sized dummies standing at the entrance to No. 1 Casemate. The open door is for soldiers only and is covered by fire from the end of its eight-foot-long corridor. The little square to its right is an armoured sentry post. To the



dummy's rear is the entrance to the area sentry post or Tobruk Stand. The dimpled concrete camouflages the shape of the entrance, confusing the photo-interpreter. Right: Mme Masson looking towards Sword Beach from the Tobruk Stand.

The picture above right shows Mme Masson, the wife of the village policeman, looking towards Sword Beach, the entrance to the Orne Canal (the main targets of the battery and reason for the assault) and Ouistreham, from the sentry-post in the 'Tobruk Stand', as the Germans called it, atop the No. 1 Casemate. Its entrance may be seen behind the German dummy. The large willow tree beyond Mme Masson is one of several telephone poles put up by the Germans. This one 'took' and has become a handsome asset to the site. The shaped concrete under it is the remains of the triangular, 20mm anti-aircraft position below which the Germans constructed a field kitchen. It was this gun which damaged Lieutenant Hugh Pond's glider as it flew over the battery and came in to land in the orchard behind the battalion start line. The attack came from the left of the photo and the AA gun crew, among others, were killed during the fighting. Also under the tree and to its left is a concrete weapon pit, one of several still extant. To the right, just beyond the nearest fence, can be seen grass bumps. They cover the magazine for Nos. 1 and 2 guns. Beyond the bushes to the right are the command bunker and the QM's bunker. Although almost impossible to photograph from the air, they (and another couple of similar bunkers) are easily seen and photographed on the ground. The 9th Battalion knew nothing of them and many of the garrison hid in them during the battle. BSM Buskotte collected several wounded in the Command Bunker.

In the event of complete failure or non-receipt of the success signal, HMS *Arethusa* and other ships supporting 6 AB DIV were to fire on the battery from H-Hour, or 0600 hrs. This fact, together with the German shells called down by Leutnant Steiner from heavy batteries near Houlgate upon the area, and the knowledge that they had another job to do, speeded the 9th Battalion's removal from the scene, for no-one was sure if *Arethusa* knew, as all pre-arranged signals failed. Although the battery was neutralised for the critical first hours of the invasion, the Germans were able to emerge from the bunkers (invisible to the aerial camera and, therefore, unknown to the battalion) and carry on firing later, even after three further air raids by the US Army Air Force. However, any activity on their part drew upon them the attention of the Royal Navy and



Post-war use as a dairy farm left its legacy of muck and mire on the battery site. This is how it looked when 10 Field Squadron, RE, arrived in 1982 to begin the clear-up to convert No. 1 Casemate into the museum.





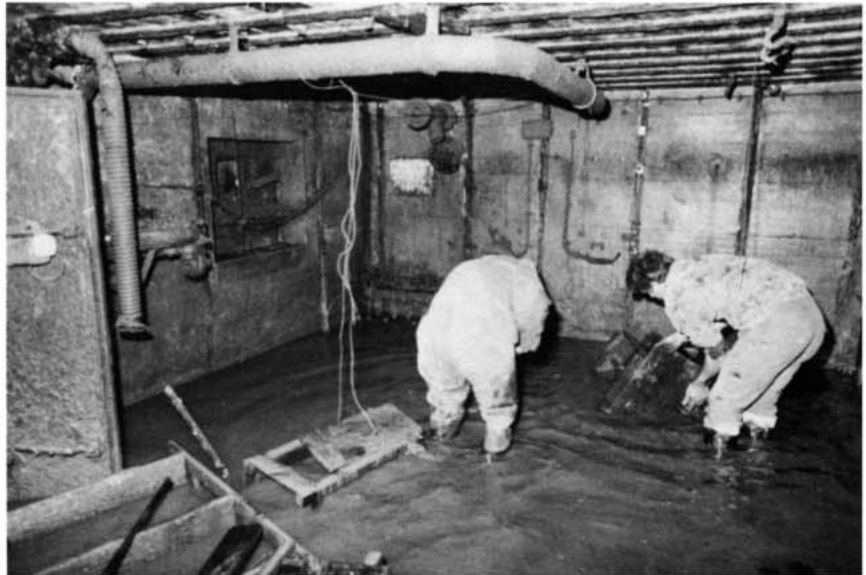
RAF who made life so unpleasant that they quickly shut down.

The museum opens from about mid-May till mid-September, 10.00 a.m. to 12.30 p.m. and 2.00 p.m. till 6.30 p.m. Entry costs 10 francs, groups are 7 francs a head and children proportionately less. The money pays for insurance, electric light, heating during the winter to keep the displays from going mouldy, slender wages (by French law) for the young lady who takes your money, sells you postcards and books, sweeps the floor, dusts the frames and display vitrines, keeps the accounts and checks the security each day. Gifts of material for display are gratefully received as long as they relate, in some way, to the battle and are in date. The exception is battledress — anything from before June 1944 is welcome. Everything is authentic and includes:

1. The 9 Para Room, with the model and directional lights, a talking guide to the battle and many items and documents from the action itself, including, for example, Lieutenant Jock Lepper's platoon commander's notebook showing his platoon roll and what happened to his men.

2. The German Room. This contains many photographs taken by members of the German garrison who occupied this position (or somewhere near it) for many months before D-Day and held it until they withdrew along the beach, by night, on August 17, 1944. There are also many items of German equipment found on site and an article from a Nazi magazine, *Das Reich*, about the Merville Battery in the Atlantic Wall.

3. The Combined Forces Room displays, as much as is possible in such a confined space, the parts played in the assault by the other Services. Particular mention is made of



The interior was flooded and it took several months to clear the junk and refuse of forty years' neglect.

the officers and men of No. 3 Commando who assaulted the Battery on June 7. But that is another story.

4. The 'Rogues Gallery' in the main corridor. This collection of some 80 photographs of men of the 9th Battalion and attached units has been compiled and contributed mainly by themselves after a bit of arm-twisting. Space is always short (German military concrete doesn't expand easily) and displays must be re-jigged to fit in new items.

The simplest route from England is from Portsmouth to Ouistreham by Brittany Ferries and then the coast road, the D514, going east. First, you will drive over Pegasus Bridge, captured by Major John Howard and his men just after midnight on June 6. Four miles later you meet the sign for Merville/Franceville Plage — the villages have been amalgamated. Carry on to the first traffic lights (in the middle of the village), pick up the 'Circuit de Debarquement' sign, turn right and drive past the Mairie, the PTT and the policeman's house to the top of the hill, about half a mile further on. Follow the road round to the left, past the churchyard which contains an RAF aircrew and a soldier of the RAMC from the First World War; after about 200 yards, a sign points right. Another 200 yards bring you to the battery.

Not only has the Airborne Assault Normandy Trust set up two museums commemorating the exploits of 6 AB DIV, just outside Caen, but, with the help of Brittany Ferries, it has also created a 'Pegasus Trail'

for people to follow, which tells the story of the whole Division in Normandy. Lieutenant-General Sir Michael Gray, Chairman of AANT, has devised it personally with the help of many men who were in Normandy in 1944. One hires a cassette tape aboard one of the Brittany Ferries ships and then follows instructions on the battlefield — a few square miles. It guides one around a series of vantage points from which one may examine the sites on which events took place, as described on the tape by the men who took part. There are ten stops at orientation points, for example, the main DZ, the Canadian Para Memorial, the Merville Battery and Ranville Cemetery.

None of this could have been done without the help of the various French authorities. In particular, at Merville, the Maire and Councillors of the Commune virtually run the Museum, from day to day, operating it as a charitable trust under French law. This status helps — a lot! It is called the Anglo-French/Franco-British (depending on one's audience) Friendly Association with a council of ten (half British, half French) who meet about twice a year and discuss policy. The best thing about the council is that no suspicion is entertained by either side regarding the intentions of the other. They are simply members of a team trying to do a worthwhile job.

The Chairman, Trustees and Members of the Airborne Assault Normandy Trust look forward to seeing you at Merville!

A sapper wading carefully along the main corridor, feeling for hidden obstacles, contrasts with the transformation to be seen eight years later.





CANADIAN PACIFIC TELEGRAPHS

World Wide Communications

W.D. NEIL, GENERAL MANAGER OF COMMUNICATIONS, MONTREAL

34/33 2 ex G.B. Via Wpeg.

RCAF /Ottawa Ont June 23rd. 1943. 8.

Mr William Reichert

report Dely.

Norden.

M 9590 Regret to advise that your son
sergeant Clifford Carence Reichert R one one nought seven six
nine is reported missing after air operations overseas June twenty
second stop Letter follows.

RCAF Casualties Officer.

THE NIGHT THE RHINE CAUGHT FIRE

By Joop van Vliet

On the night of June 21/22, 1943, in the occupied Netherlands, many people, up late or awake in bed, were listening to the droning sounds overhead. On this, the shortest night of the year, the British were again bombing Germany. It was a reassuring sound, for it meant the war was being brought home to the enemy, and yet, at the same time, it was frightening. Now and again the steady throb of the bombers was intermingled with different sounds: the higher-pitched whine of other planes and the rattle of gun-fire. German night fighters were trying to intercept the bombers. In many a home, conversation in the living room or around the kitchen table stopped. Switching off the light, many people stepped outside to watch the sky. Others, unable to sleep, got out of bed and opened a window to do the same.

Around 2.20 a.m., a bomber was hit over Groot-Ammer, in central Holland. A few minutes later, at Jaarsveld, a small village on the north bank of the river Lek (Lower Rhine), this same plane was seen flying west to east and on fire. Making a wide circle to the left, the doomed aircraft crossed the river to the north side, then turned towards Jaarsveld. Coming in low over the houses and farms of the hamlet of De Graaf, it terrified the people who saw it coming down and many of them, convinced it would crash on top of them, fled into their homes looking for shelter.

Then, making a last turn, the plane disintegrated and plunged into the river. As burning petrol spread across the water, flames lit up the night sky and, to those who saw it, it seemed as if the very river itself was ablaze. Going down with the stream, the pool of fire had stretched to about a mile long before its flames slowly died out.

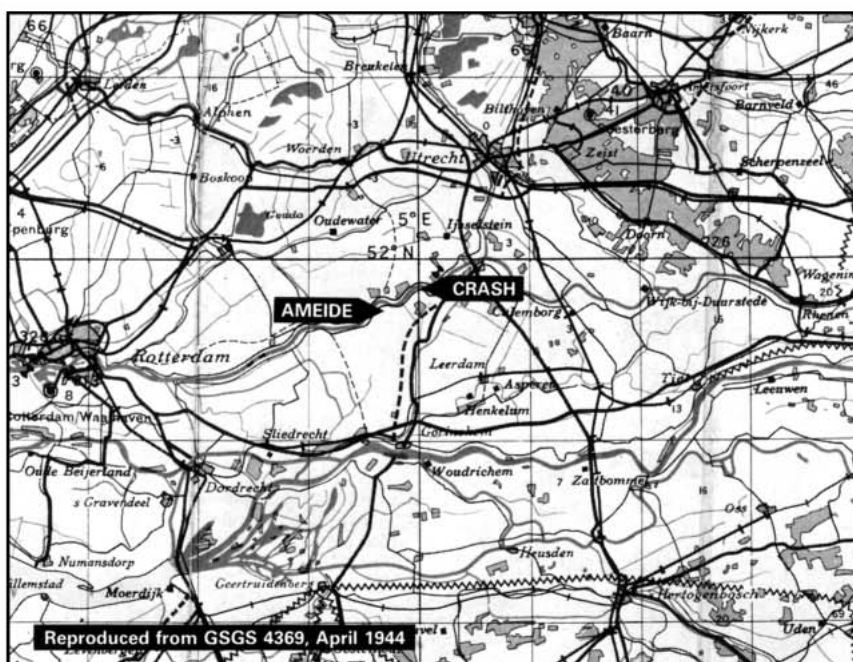
People came down to the river to see what had happened, but in the darkness little could be discerned. However next morning,

when they returned, they could see part of the plane's tail sticking out above the water. Later in the day it disappeared below the surface. On the bank of the river numerous smaller parts and fragments of the aircraft were found. Much more horrifying was the discovery of parts of human bodies. One such part, a leg with a shoe, was found as far away as a mile from the crash site. The human remains were collected and buried at the General Cemetery at nearby Lopik.

Later that day, a motor bus bringing German soldiers arrived at the river bank.

From a distance, people could see it had coffins on the roof. The Germans stayed a while, but there was nothing to collect and they left empty-handed.

During the war and for a long time afterwards, nobody in this region knew anything about the plane or what had happened to its crew. As no authority seemed interested, we took it on ourselves to research the crash. This then is the story.



Reproduced from GSGS 4369, April 1944



Clifford Reichert, pilot.

On June 24, 1941, No. 408 (Canadian) Squadron was formed at RAF Lindholme in Yorkshire, as part of No. 5 Group, RAF. For the first 15 months of its existence, the squadron was equipped with the twin-engined Handley Page Hampden medium bomber. Its first Commanding Officer was Wing Commander N. W. Timmerman, a veteran Canadian in the RAF who had been awarded the DFC. As No. 408 was one of the first Canadian bomber squadrons formed overseas (the first was No. 405), Timmerman wanted something typically Canadian for the squadron's badge. He chose the Canadian goose, with the simple motto, 'For freedom'.

A month after it was formed, the squadron was transferred to RAF Syerston in Nottinghamshire. From here it flew its first operational sorties, bombing towns and harbours in Germany, Holland, Belgium and France and carried out 'gardening' minelaying missions.

Because of the construction of hard-surfaced runways at Syerston, on December 9 the squadron moved its aircraft a few miles to Balderton airfield, retaining its administrative and living quarters at Syerston, but, when the grass runways there proved too



John Dockerill, the wop/AG, left, with the mid-upper gunner, George Pridham.

muddy for fully-loaded Hampdens, they went on to North Luffenham on January 28, 1942. From here the squadron took part in the first of the 1000 bomber raids, the famous attack on Cologne on May 30/31 to which it contributed 20 planes.

On March 26, Wing Commander A. C. P. Clayton succeeded Timmerman as CO and was in turn replaced by Wing Commander J. D. Twigg on May 18. When Twigg was lost in a raid on Saarbrücken on August 28/29, Wing Commander W. D. S. 'Tiny' Ferris took command.

On September 17 the squadron stood down from operations in preparation for a move to RAF Leeming near Northallerton in Yorkshire and conversion to another Handley Page bomber, the four-engined Halifax. From October to December, training was carried out on the Halifax II.

When on January 1, 1943, No. 6 (RCAF) Group came into being under the command of Air Vice-Marshal G. E. Brookes, 408 Squadron was put under its operational control. On January 8/9, 'Goose' Squadron made its first Halifax operation, a minelaying mission.



Gordon MacLean, the flight engineer.

With the change-over from the four-man Hampden to the seven-man Halifax, many of the old Hampden crews left and new crews had to be formed. Thus it was that skipper Clifford ('Ricky') Reichert's crew was assembled on February 10. The 24-year-old sergeant came from Morden, Manitoba. He was one of 11 children of a farming family who had emigrated to Canada from Austria. Like so many Canadian boys who had listened to tales of Canadian flyers in World War I, young Clifford had dreamed of becoming a pilot. When war broke out four Reichert brothers volunteered, Clifford joining the RCAF.

During training in Canada, Clifford had met John Dockerill, a boy from Fenwood, Saskatchewan and, like himself, a farmer's son and they soon became close friends. Having completed their training — Clifford as a pilot, John as a wireless operator — they were both posted to Britain in May 1942 and assigned to 408 Squadron. When Reichert formed his own crew, 21-year-old Sergeant Dockerill ('Doc') became his wireless operator/air gunner.

Flight engineer of the new crew was Sergeant Gordon MacLean from Souris,



The bomb aimer, Earl Monahan.



The navigator, Jim Russell.



Rear gunner, Bill Searle.



The hunters and the hunted. Canadians of 408 Squadron, including Reichert's crew, pictured on their return to Leeming after a raid to Dortmund in May 1943. On the operation to Krefeld on June 21/22, three out of the squadron's thirteen aircraft would fail to return, with a loss of 16 of these men.

Prince Edward Island. Before he joined up, MacLean had been a mining engineer. At 35 he was the oldest crew member, hence everybody called him 'Pop'. For someone flying in a night bomber, he had a strange handicap: he suffered from night blindness.

Bomb-aimer was 22-year-old Pilot Officer Earl Monahan ('Monty') from Kingston, Ontario. His parents had died when he was very young and he and his sister had been raised by aunts. Before the war he had been a laboratory worker.

Pilot Officer Jim Russell ('Russ'), a book-keeper from Toronto, was the navigator. His wife's name was Mary and when the new crew first got their own plane, the Halifax JB967, EQ-'X', they named it after her: 'The Mary'.

Mid-upper gunner was Sergeant George Eric Pridham (his friends called him 'Gip'). Twenty-two-year-old Pridham was an old hand, having seen battle with the Hampdens. Like Russell, he was a bookkeeper from Toronto, and was engaged to Joyce Wilson from Saint John, New Brunswick, a girl he met during his training there at the 'Old Millidgeville' air base.

Rear gunner Bill Searle was 25, married and the only crew member with a child, a son, Robert. His wife, Catharine, was Finnish. Most of her family had perished in the Russo-Finnish war of 1939-40, but she and her sister had escaped their fate, having gone to Canada before war broke out.

From February to April, 408 Squadron had few operational missions, most time being spent on training flights.

Reichert's new crew had their first operational trip as a crew on the night of April 4/5, 1943. Flying Halifax DT677 EQ-'P', they bombed Kiel in northern Germany. Next, on April 28, they carried out two minelaying sorties, the first to the Frisian Islands, the second to the Kattegat. 'Those trips are both entered in our logbook for the 28', flight engineer MacLean wrote in his scrapbook diary, 'as we took off after midnight on the first trip and before midnight on the second one.'

The following night, April 29/30, on the return flight from a mission to Essen, they were hit seriously for the first time. MacLean wrote: 'We are hit by Flak while passing over Amsterdam and while crossing the North Sea at 19,000 feet we are compelled to feather

our starboard outer engine and make a three-engine landing at base. This is done quite safely and the engine is now O.K.'

May brought bombing missions to Dortmund (nights of 4/5 and 23/24) Düsseldorf (25/26), Essen (27/28) and to Wuppertal (29/30). On June 11/12 they went to Düsseldorf again and the night after that to Bochum. A week later, Reichert's crew had their first mission to a target in an occupied country, when they bombed Le Creusot in France. It was also to be the last time they came safely back.

Then came June 21. At Leeming, as on other airbases, crews were briefed for their next mission. The target was Krefeld. In all, some 700 Bomber Command aircraft were to attack this town of 150,000 inhabitants in the south-west corner of the Ruhr industrial area, on the west bank of the Rhine. Zero

hour for the attack was 1.30 a.m. and Pathfinder Mosquitos, using the Oboe navigational device, were to drop target-indicating flares. For 408 Squadron, time of take-off was 11.35 p.m. Each aircraft was to carry two 1000lb MC (or one 2000lb HC), plus 56 30lb, 510 4lb and 30 4lb incendiary bombs. That evening, 13 planes with the squadron code 'EQ' stood ready on the tarmac, filled with fuel, bombs and ammunition.

First to take off, at 11.35 p.m., was Clifford Reichert. Because their own JB967 'X' was not serviceable, Reichert and his crew had been assigned Halifax BB375 'T'. After them, at one-minute intervals, came Reichert's close friend, Sergeant Pilot B. R. Milligan with JB858 'S', Flying Officer C. W. Smith in JB968 'R', Flying Officer H. B. Lancaster in JD216 'P', and so on. One by one, 408 Squadron's planes disappeared into the night sky. Last to go up, after some delay, was Flying Officer D. T. McBain in JD174 'A', at 00.04 a.m.

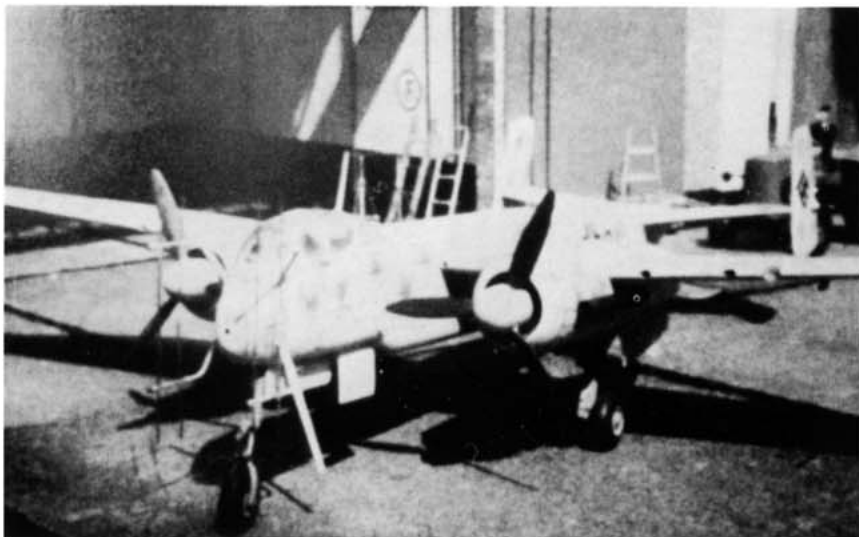
Crossing the East Coast, the squadron took its place at the tail of the bomber stream without problems. In all, 110 Lancasters and 37 Wellingtons from No. 1 Group, 98 Stirlings and 11 Lancasters from No. 3 Group, 132 Halifaxes and 40 Wellingtons from No. 4 Group, 92 Lancasters from No. 5 Group, 44 Halifaxes and 28 Wellingtons from No. 6 Group and 12 Mosquitos and 101 heavies from No. 8 Group took part in the raid, a total of 705 planes.

Over the Channel, the gunners tested their guns, as they did on each mission, by firing a few bursts. The weather was fine and visibility good. But the crew knew from experience that this would make them easier prey for enemy night fighters. The long routine of vigilance began.

As the bombers approached the Dutch coast, the alert was sounded at the German night fighter base at Venlo, in the south-east of Holland, home of I/NJG 1. Only recently, the unit had received its first Heinkel He 219A-0s. This brand new aircraft — the 219A-0 was in fact still a pre-production model — was armed, not only with two 20mm MG151 cannon in the wings and four MG151 guns in the ventral tray, but in addition had one 13mm MG131 in the rear cockpit able to fire obliquely upwards. As British bombers still had no guns under-



One of those waiting for the bombers was Hauptmann Hans-Dieter Frank (centre), serving with I/NJG1 based at Venlo. His night fighter unit had only recently been re-equipped with the Heinkel He 219A-0 with its devastating 13mm MG131 pointing obliquely upwards to be able to attack the enemy bombers in their blind spot underneath. Reichert's Halifax would be his fifth victory that night alone.



The radar-equipped He 219 with the sting in the rear cockpit . . .

neath, this offered quite new possibilities for attack. The first night that this new plane was in combat, June 11/12, Major Werner Streib, commander of I/NJG 1, shot down five Lancasters.

One of the He 219s taking off from Venlo to intercept the enemy bombers that night was G9+CB, piloted by Hauptmann Hans-Dieter Frank with Oberfeldwebel Erich Gotter as his radio operator. Twenty-four-year-old Frank was from Cologne and Gotter, 26, from Breslau.

The clear night favoured the German defenders. The British bomber force had hardly crossed the Dutch coast when the first bomber, a Wellington from 429 (RCAF) Squadron was shot down, crashing near Stavenisse on Tholen Island.

At 1.20 a.m. Dieter Frank had his first kill, a Halifax from 158 Squadron. It came down near the village of Dinther in North Brabant. Within three minutes, he had shot down a second Halifax. This one from 35 Squadron crashed near Uden. At 1.39 p.m., further to the north, Frank made it a hat trick when a third Halifax, also from 35 Squadron, went down near Wamel, just south of the river Waal. His fourth victim was a Halifax too. It was from 77 Squadron and crashed near Esch in North Brabant at 2.04 p.m.

At about this time, 408 Squadron, which had passed unscathed through the Kammhuber Line flak belt and avoided the night fighter assault, released its bombs over Krefeld.

The attack had started at 1.30 a.m. punctually. Although there was a slight haze and a thin layer of cloud hanging over the target, the early arrivals had recognised the target visually. The Pathfinder markers, which were on time, accurate and concentrated, were clearly seen by all crews. Five minutes after the first bombs had been dropped, major fires were already burning, particularly large explosions being seen at 1.40 a.m. and 2.03 a.m.

By the time 408 Squadron arrived over the target, the whole town appeared to be one vast conflagration with smoke rising to 15,000 feet. Squadron Leader B. E. Harriss, commander of Reichert's 'B' Flight and flying DT749 'O' later reported: 'The primary target was approached by means of Red and Green T.I. Markers and also by PFF Markers. Red T.I. Markers were in the bomb sight at moment of release and release was carried out at 0204 hours from 16,000 feet on a heading of 120 degrees M. Red T.I. Markers were seen cascading at approximately 0201 hrs. Fires numbered 25 as the aircraft approached and as aircraft left at 0210 hours, the fires had grown into 10 very

large ones. An orange-coloured explosion lasting 5 seconds at 0210 hours was seen in the target area. Considered a very good raid.'

Of the 705 bombers that took off, 623 bombed the primary target. That night, half of Krefeld was destroyed and over 1,000 of its inhabitants were killed.

But 408 Squadron was about to pay for the success of its mission. Of its 13 planes, three would be shot down on the return trip, a loss of 23 percent (Bomber Command as a whole lost 43 aircraft, an overall rate of 6 percent).

The first plane was lost while still over Germany. It was JD209 'B', piloted by Pilot Officer Josef Patry. Patry, his navigator Flight Sergeant Norman Kellner, bomb-aimer, Sergeant Desmond Rudge, and gunner, Sergeant Albert Lewis, died in the crash. (Today, they lie buried at the Reichswald Cemetery.)

The second, DT772 'E', was shot down near Zeist in central Holland. The entire crew, all sergeants, perished: pilot Dennis Brooke (his real name was Blum but being a Jew, he flew under a false name to protect himself in case of capture), navigator George Bisheff, bomb-aimer James MacDonald, wireless operator Michael Shakespeare, gunners Bill Walls and Joseph Archambault and flight engineer Cecil Sebelius. (They are buried at the General Cemetery at Amersfoort.)

Not much later, Reichert's plane was picked up by German radar. Dieter Frank,

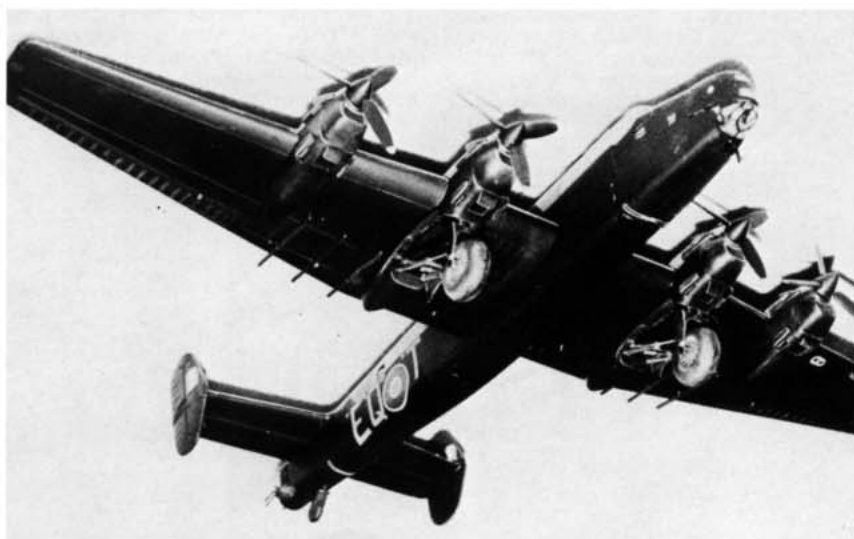
after his four earlier kills, had again gone up to intercept the enemy bombers on their return flight and his plane was directed onto BB375 'T'. The crew had not yet seen him when he loosed off his first volley at the underside of the bomber. Russell, the navigator, later reported: 'We were attacked by a fighter at 0220 hours. No one saw the fighter at all. It is my personal opinion that the first attack was from the unusual angle of the front and underneath.' Pridham, the mid-upper gunner, added: 'We had no troubles till we were flying on the way home. Then a German fighter, I thought a Messerschmitt 110, jumped us. I never saw him till a second before he opened up on us. He came from underneath us and it was impossible to see him.' From these reports, it is clear that an attack from below was a novelty to the crew and that it came as a complete surprise to them. Obviously, they had not yet been told or heard of the new Heinkel 219.

Dieter Frank's first burst hit the fuselage of the Halifax and caused havoc inside the plane. Searle, the rear gunner, MacLean, the flight engineer, Monahan, the bomb-aimer, and Dockerill, at the wireless, were killed outright. Pridham, in the upper turret, was very badly hit in his right leg. Russell, sitting at his navigator's table, had a bullet come up between his legs which shot the pen out of his hand.

Reichert was not hit. He asked his crew over the plane's intercom to report. To his horror, only Russell and Pridham replied. Pridham's voice said: 'Searle and MacLean are dead.' Nothing was heard of Monahan and Dockerill and it was assumed that they were also dead.

There was no time to react to the shattering news for the He 219 was after them again. Dieter Frank's second attack set the plane on fire. By now, Reichert had lost course and was in fact flying back to the east. As he turned the aircraft around, he realised he could not hold it much longer and he decided to order the crew to take to their parachutes. 'Jump if you can', he shouted. 'I will hold up the plane.' Russell baled out first. In great pain and with a great deal of effort, Pridham also managed to jump but it was too late for Reichert. With him and the bodies of four of his crew aboard, the burning plane crashed into the river yet by his sacrifice Reichert saved the lives of two of his crew.

Jim Russell landed in a field near the village of Ameide, south of the river. For some days he managed to evade capture by hiding in the fields and living off his emergency rations. Back in England, he had been told that if you had to jump over



. . . and the vulnerable underbelly of the Halifax.



Left: With a badly smashed leg, George Pridham managed to bale out, landing in this field south-east of the village of Ameide while the aircraft crashed some 2,500 yards away in the waters of the Lower Rhine. He was soon found by Janus Manschot and carried on a stretcher to the house of Dr van Putte right.



Forty-two years later George returned to Holland to retrace his footsteps, meeting Mr Manschot once again before paying a visit to the doctor. With bitter irony, Dr van Putte was killed on September 5, 1944 by Allied fighters shooting up a boat on which he was attending to the casualties of an earlier strafing.

occupied territory, you were lucky, because the population would be friendly and help you to escape. So, after a few days, he ventured out to a farm. It was owned by the 't Lam brothers who, unfortunately, did not speak a word of English. Seeing that they were unable to understand him, Russell went to the village to look for help. To his utter disappointment, he was promptly handed over to the Germans and spent the rest of the war in Stalag Luft 4 PoW camp.

George Pridham came down in a pasture full of grazing cows. When he realised that his leg was covered in blood and he needed immediate help, he took the whistle from his emergency kit and blew it.

Janus Manschot from Ameide, who had watched the plane crash, heard the whistling and, on investigation, found the unfortunate airman. He went away for help and came back with three men and a stretcher. As they were carrying Pridham to the house of Dr J. W. van Putte at the Voorstraat in Ameide, a car with two German soldiers arrived. Van Putte applied first aid, then told the Germans the patient needed hospital treatment at once. The Germans took Pridham to St Anthonius Hospital in Utrecht. From there, he was moved to Amsterdam, to the Luft-waffen Lazarett at Wilhelmina Gasthuis Hospital, where his right leg was amputated.

Pridham remained there for six weeks in the company of other Allied airmen although they were all cut off from the outside world. The Dutch nurses, who were not allowed to care for the airmen, nevertheless managed to smuggle sweets and cigarettes to them, and letters written on tiny pieces of paper.



Although one of the Rolls-Royce Merlins from the Halifax had been recovered from the river in December 1984 (below), another token dive was made for George's sake in May 1985. Amazingly, the divers brought up the remains of a parachute buckled to a harness which George firmly believed could only have been Clifford Reichert's because no other member of the crew was still alive to clip on his 'chute when the aircraft hit the water.



For a year, Pridham was in several PoW camps, including Stalag Luft 3 near Frankfurt a. d. Oder and other camps in Poland and Lithuania. Then, in the very first days of June 1944, he was exchanged for German wounded via the International Red Cross and returned to Britain — one of the lucky ones for later such exchanges were curtailed. Sent back to Canada on June 18, he married his fiancée the same year and, after two years in Toronto, he moved to Saint John (where he still lives).

Hans-Dieter Frank, by then Gruppenkommandeur of I/NJG 1, and his operator Erich Gotter were killed in an air accident on September 27, 1943, when their He 219 collided with a Messerschmitt Bf 110 over Heeze, about 15 miles north-west of Hannover. Frank, who was credited with 55 kills, was buried at a cemetery at Bergisch-Gladbach, near Cologne, and Gotter's grave is in his home town of Breslau, East Germany.

In Canada after the war, the fate of Reichert's plane remained a mystery. No one, not even the surviving crew members, knew where the plane had crashed or what had happened to the men who had died. Their next-of-kin assumed that there had to be graves somewhere, and some of them even asked acquaintances travelling to Europe to visit cemeteries to look for the names of their loved ones. So little information was available that when the family of MacLean dedicated a plaque in the church of Souris, it simply, but erroneously stated: 'In loving memory of Gordon Mitchell MacLean, killed in action over Krefeld, Germany, June 22, 1943.'

In 1977, George Pridham and his wife made a trip to Europe. Flying to Switzerland, they took a boat trip down the Rhine and Lek to Rotterdam, completely unaware of the fact that when their ship passed the inconspicuous village of Jaarsveld, they were sailing right over the crash site of George's aircraft.



In June 1944 George was repatriated to Canada where he married the girl he had left behind.

In the autumn of 1983, as research for this story continued, a team of amateur divers led by Piet Deelen began for the first time to look for the vanished plane. Many parts and fragments were located, strewn across half a mile of the muddy river bed. Then, after many hours of diving, Deelen found one of the engines which was recovered from the river on December 1, 1984.

The people of Lopik wanted to have a worthy memorial to commemorate the five men who died in the crash and sculptor Jan van Ipenburg designed a 17-foot 'Broken Wing' made of stainless steel, with the recovered engine placed next to it in a steep diving position. Both were mounted on a base of white marble and surrounded by a shelter constructed of three nine-foot-high glass panels and two solid walls of black steel.

Set up on the river dyke, at a spot between the village of Jaarsveld and the crash site, the monument was unveiled on May 4 (Dutch Remembrance Day), 1985, by the Commissioner of the Queen of the Province of Utrecht, Mr. P. van Dijke, and by George Pridham, who had been invited by the people of Lopik for the occasion. After 42 years, although officially the five airmen remain listed as missing, the place where they died had at last been commemorated.

On the occasion of Pridham's visit, a new dive was organised and the discovery of the remains of a parachute pack buckled to a harness belt gave rise to the possibility that Reichert may have managed to clip on his 'chute before he crashed.

One year later, on May 4, 1986, the monument was adopted by the children of the Eben Haëzer Primary School at Jaarsveld, as part of a national programme in Holland to foster the adoption of war memorials by local schools. In this way it is hoped that Dutch children will learn something about what happened in their region during the war and what the Allies did for their liberation.



Wed for forty years, George and Joyce beside the monument dedicated on May 4, 1985 commemorating the five missing crew. (The other survivor, Jim Russell, when contacted by the

Canadian Veterans Administration, said he appreciated that a monument had been set up by the Dutch, but that, because of his memories of the war, he would rather not revisit the site.)







Morotai is an Indonesian island in the area known as Maluku (the Moluccas). It is two degrees north of the equator and a short distance from Halmahera which is much larger and easily identified on maps of the region. The thousand or so islands of Maluku have great historical significance as the fabled Spice Islands of a past era which saw the Portuguese, Dutch and English fight one another to gain control of the lucrative spice trade. During the Second World War Morotai was an important base for American and Australian forces and I spent nine months there in 1945 with the Royal Australian Air Force.

I have been retired from business for over 16 years and during that period and before had the good fortune to travel extensively in many parts of the world. When my two sons suggested that the three of us visit Morotai because it was off the regular tourist track, and would bring back to me memories of 44 years ago, my wife remarked that she thought I was too old to undertake a trip of this nature. My elder son replied with rugged Australian humour: 'Don't worry, we'll bring Dad back, even if he's in a box!'

Having decided that we would go, we had the usual injections for cholera and typhus plus gamma-globulin for hepatitis and commenced an anti-malarial course of Maloprin and Chloroquine.

Two weeks later we were on our way and following 'Bloody Mary's' in the Captain's Club at the airport, we flew from Perth to Denpasar, and our overnight stay in one of Bali's luxury hotels was of the usual high standard. We left early next morning in an F28 jet for Ujung Pandang (formerly Macassar), thence to Ambon where we changed to a propeller-driven F27 for the trip to Ternate which is adjacent to Halmahera.

Ternate was once the centre of the spice trade for the area and has several old forts dating back to the early 1500s. It also has a volcano still issuing sulphur fumes which in 1750 erupted violently leaving a deep lake in one section with precipitous sides at least 50

RETURN TO MOROTAI

By George Battley

metres high. The lava flow from that eruption entered the sea nearby where the sand is quite black and the jungle is trying hard to take control over the scoria but it will be a long time before it wins the battle.

Our hotel, the Nirvana, was in the main street of the town and we were welcomed by the owners. According to my dictionary 'nirvana' means 'absorption into paradise', but I do not think this definition should be taken literally in regard to this hotel.

There are many Timor ponies in Ternate drawing various types of carts in the rather

untidy streets and most of the buildings are fairly old. Several hulks are rusting away in the harbour but the wharf appeared to be in good repair. The population of the island is about 20,000.

The working day starts early in this part of the world, and after breakfast next morning my sons went snorkelling close to a nearby island and reported that the coral reefs were magnificent and the water luke-warm. After



Forty-four years after he left Morotai in the Indonesian Molucca islands, George Battley, former Air Transport officer, returns. Top: Here with his younger son, John, he inspects the old Wama airstrip, slowly being recaptured by nature (above).

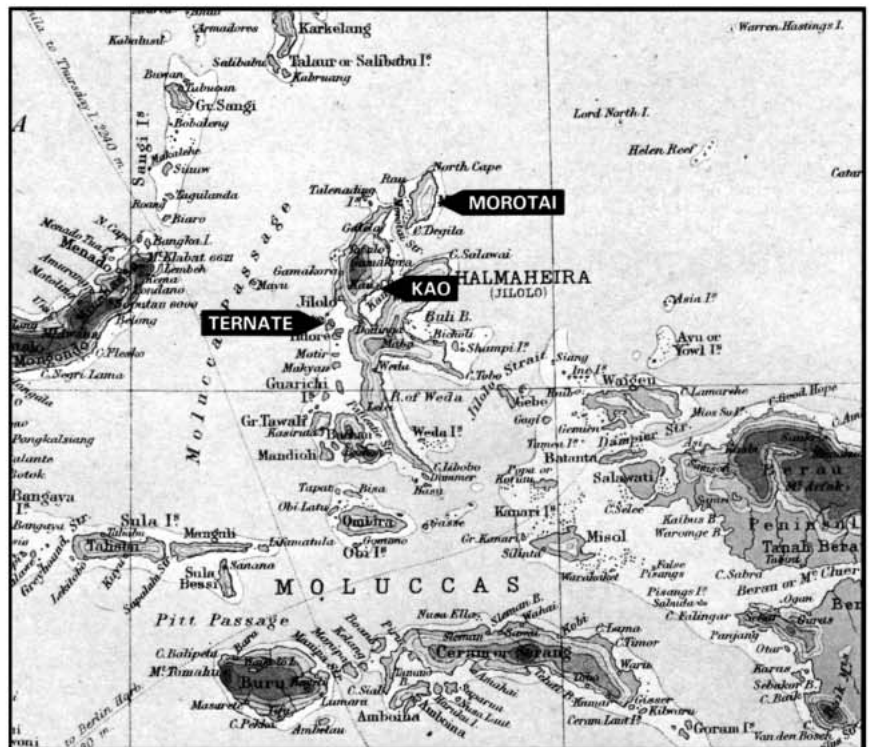


lunch we enjoyed a 40-kilometre circular tour of the island inspecting the ruins of the old forts and other relics of a bygone era. We met many happy children and the local people were friendly and courteous. That evening we boarded the *Ternate Star*, a wooden vessel about 30 metres long with two decks, for an overnight trip to Daruba in the south of Morotai and about 180 kilometres distant. The boat had many passengers and it seemed that all who knew a few words of English were anxious to try them out on us. We had been fortunate enough to secure two cabins on the upper deck, each about four metres square with double bunks. Mine was half filled with freight, but I was thankful to be able to lie down in relative comfort and get some sleep. During the night there was a severe rain storm and those sleeping on the deck got very wet. I was told the vessel rolled a lot but I slept through it all.

One of the passengers had an interesting story to tell. As the result of a recent dry spell the water in a well near the village of Daruba had become very low and it was decided to deepen it. When work commenced, human bones were found, presumably of an American Serviceman, with an identification tag and silver cross. There was no trace of a skull, and it would seem that he was beheaded and his body thrown down the well. Later we took photos of the bones and forwarded details to the Pentagon in Washington.

We arrived at Daruba at 6.00 a.m. and scrambled over a lot of dirty oil drums to another vessel, then on to the jetty. It was only a short distance to our 'hotel' or should I say boarding house, which backed on to the sea. We had arranged for an interpreter and

After the Portuguese arrived in the Moluccas in 1512, with the Spanish, English and Dutch all vying for the lucrative trade in spices for which the islands are famous, decades of conflict have left their mark. *Left:* Dutch fort at Ternate and *(right)* the British fortification defending the harbour.



Wars ancient and modern. *Left:* Son John with cannon at Ternate and *right* Robert, the elder, with an American 2,000lb bomb in a scrap yard in Daruba on Morotai Island.



Left: En route to one of the many jungle dumps of World War II materièl right.

our first call was at the local police station where we had to explain why we were visiting the area. Then followed a further visit to other senior officials. Later our passports were requested and returned after several hours. The interviews were of a friendly nature but quite searching, and it was obvious that visitors other than those on official business were extremely rare or non-existent despite the fact that thousands of members of the armed forces passed through here in 1945 and many units were stationed in the south of the island.

Our interpreter and guide soon arranged the hire of a small Japanese bus of very limited power. Although I am not particularly tall, I was unable to sit upright in either of the back seats, and was moved next to the driver where I could just squeeze in. My sons were almost as cramped and on steep inclines all passengers had to walk while the driver engaged low gear and hoped for the best.

During the war, I was attached to the Air Transport section of Transport and Movements and most of my working hours were spent on Wama airstrip which is slowly

reverting to jungle, although it is still possible to walk the full length. Our working hut and cargo shed have long since gone but memories of the past, some tragic, came flooding back. Unfortunately, the former nearby American airfield called Pieta is closed to visitors, except on civil flights, and the old graveyard of unserviceable planes is no more. Our camp site also could not be seen because the road to it was closed. However, on following the road from Daruba along the east coast, we were shown some large American dumps in ravines



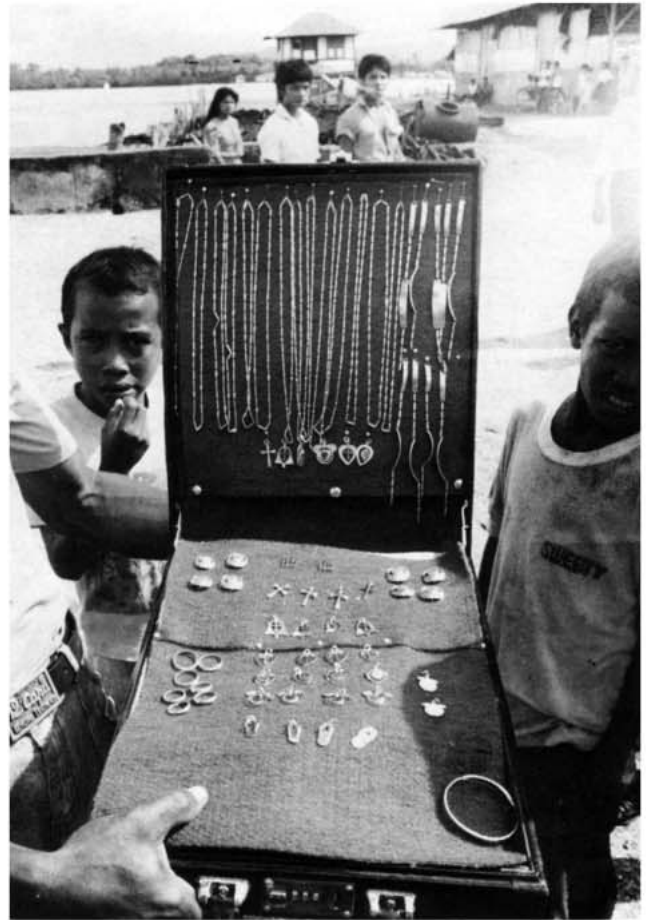
While on their trip, the Battleys met up with Dutchman Anton Rijdsdijk, employed by the Indonesian government, who was photographing WWII wreckage in his spare time. Above left: He had located this Amtrack in the undergrowth near Daruba.

Above right: According to the local inhabitants, scrap merchants had combed the area just six months previously. This pile of junk lay near the harbour. Below left: Unusual gate ornaments and right the defences at the local police station!





The remains of old aircraft *above* are being converted in this factory *below* into more decorative products *right*. (A. Rijdsdijk)



covered by jungle. Many other dumps had been removed by contractors from Surabaya several years previously.

One of the pleasures I recall was travelling in an amphibious DUKW to a nearby island named Kolarai and fishing with explosives, eating our catch there and searching for seashells. We resolved to revisit Kolarai and at seven the next morning we left in a dugout canoe with outboard. The water was very calm and amazingly clear with many coral reefs of great beauty. Our canoe leaked rather badly but, after bailing out a dozen or more saucepans-full every five minutes, there was nothing to worry about, and the outboard purred along quite nicely.

After an hour we arrived at the island amid great excitement by the locals. The population in 1945 was under 10, but now it must be 60 or more. One old man of my vintage produced an ancient photo of an American Serviceman, and we were made most welcome. We took many group photos and on our return to Perth had these enlarged and posted for delivery there — I am sure they caused a sensation on arrival.

My sons went snorkelling while I sat on the beach in the shade with some of the men from the village. Later we enjoyed fresh coconut juice and flesh — it was all so natural and friendly. The island is quite small with lush foliage and white sandy beaches — just what many people dream about. At our departure one of the older men presented me with several beautiful shells and the skeleton of an unusual small fish while the whole village assembled on the beach to bid us farewell.

A slight deviation from our homeward course found us at MacArthur's Island where the General had his headquarters for a period during the war. I had not heard of this previously, but the remains of the HQ were there including rusted washing machines and a 2-inch watermain connected to Daruba. After lunch we visited the well diggers and

took the photos to which reference has already been made. We were surprised to hear that boxing contests were to be held that evening. The sport is very popular here and the ring was erected in the open air just off the main street. The spectators stand except for a few forms. On our arrival we were treated as special guests and, during the

half-hour's wait for the first bout to start, the whole village viewed us with great interest. There were seven bouts and the enthusiasm of the onlookers was tremendous.

Next morning it was time to leave the island and we were surprised at the number of friends we had made who came to the airport to say goodbye. The plane was late



Inevitably, from time to time the jungle gives up its dead. Fortunately, in the case of this American, his dog tags were found with his remains, ensuring a fitting end to another 'missing in action' report. (A. Rijdsdijk)



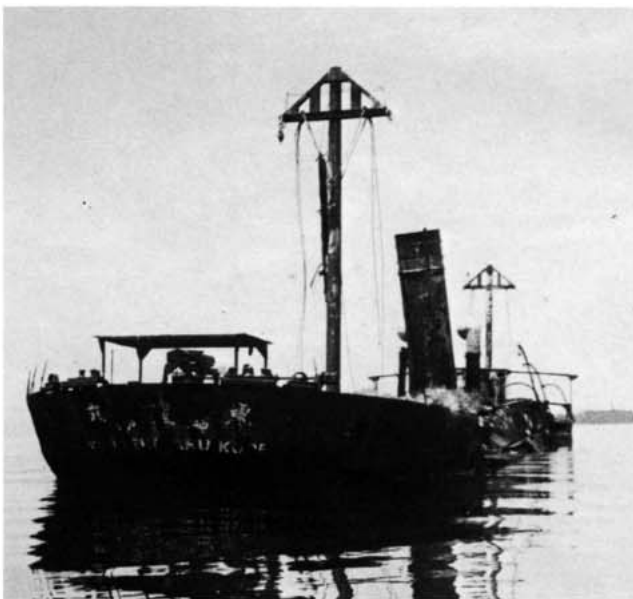
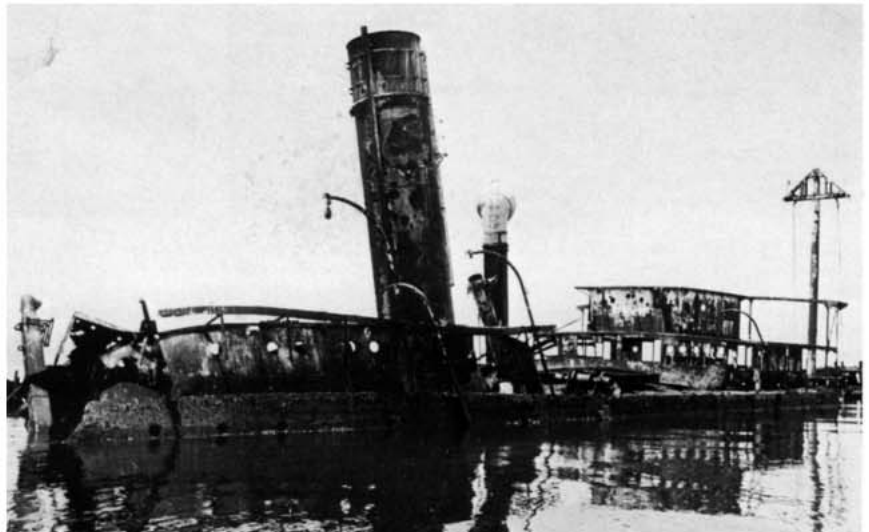
but time is not too important in this region. Our Mervat Airlines aircraft was short-bodied, twin-engined and propeller-driven, with a passenger capacity of around 20. It flew at a fairly low altitude and the views of the numerous small islands we passed over, were superb. Our one stop before Ternate was at Kao, and there were some white knuckles showing on landing and take off on the short grass strip.

We left the Hotel Nirvana at six the following morning for the one hour hop to Manado where we boarded an Airbus with passes marked Denpasar. It was too hot to leave the aircraft at Ujung Pandang and we suddenly discovered we were non-stop to Jakarta. However, later we were able to catch a flight to Denpasar for our overnight booking in Bali.

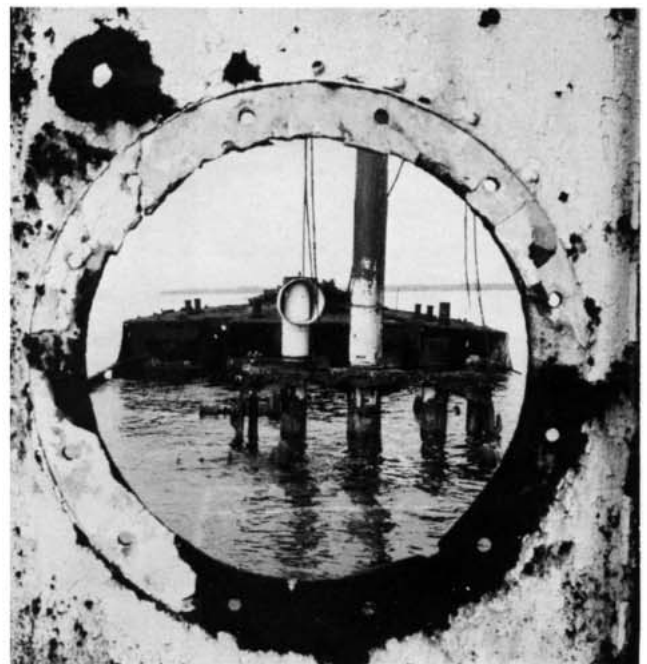
We were back to luxury and our return flight to Perth was a pleasant finale as it happened to be my 79th birthday, and the flight attendants treated us in VIP style.

The three of us thoroughly enjoyed the trip with so much crowded into just eight days. I have not done any reminiscing about the war period because the events on the island were as nothing compared to other areas of conflict. What we enjoyed most of

In the waters of the island of Halmahera, near the village of Kao where the Battleys' aircraft touched down returning from Morotai, lie the mouldering wrecks of three Japanese ships. (A. Rijsdijk)



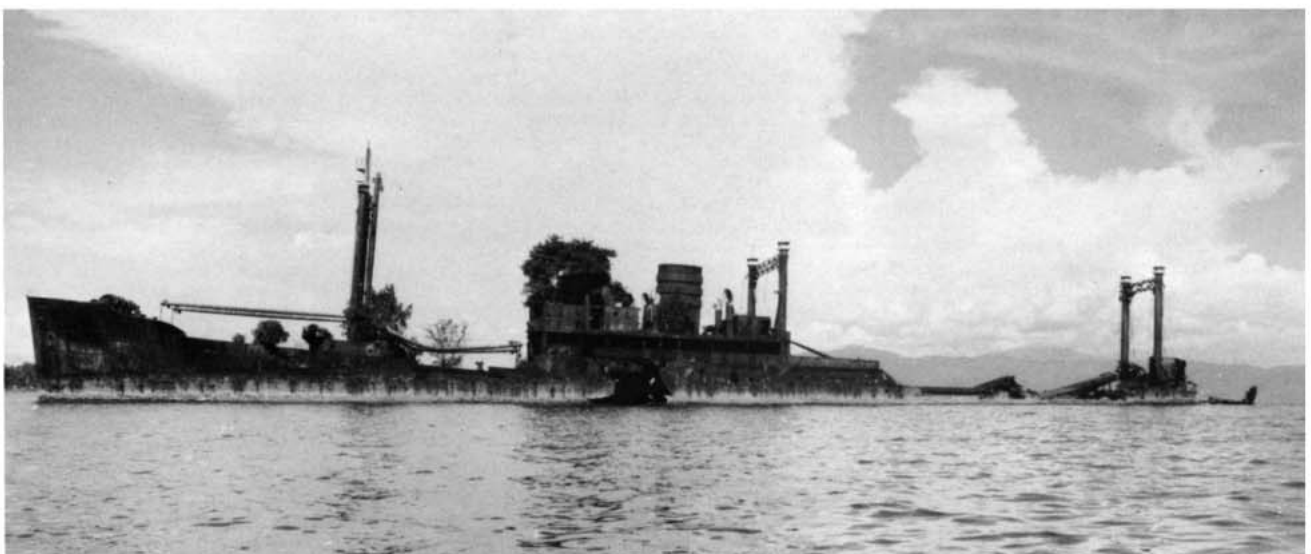
The name is almost discernible on the stern of the second vessel.





The jungle has even gained a hold on the third ship, the anti-aircraft guns almost disappearing beneath the foliage of a tree growing amidships! (A. Rijsdijk)

all was meeting so many people who were happy and smiling and always courteous despite the lack of what we consider to be the essentials of life. However, if you want to get away from the beaten track in Indonesia you must be prepared for the 'Mandi', i.e. splashing saucepans of cold water over yourself from a container in lieu of a shower, and a hole in the ground with footpads at the sides for a toilet with definitely no toilet paper. We have had previous experience in these matters and are also careful in regard to drinking water. Accommodation is fair and Indonesian food can be very tasty. The weather at sea level is always hot. My eldest son loved it and after his return said: 'If I owned an island like Kolarai, and could live on it, life would be perfect'.
I wonder?





ROYAL AIR FORCE BOMB DISPOSAL

Today when one thinks of bomb disposal or to give it its modern NATO title of Explosive Ordnance Disposal (EOD), it is inevitably in the terrorist context. Hardly a week passes without a newspaper reporting that 'Army bomb disposal experts' carried out a controlled explosion or rendered a car or parcel bomb safe. This work is generally carried out by members of the Royal Army Ordnance Corps (RAOC) and in Northern Ireland this is always the case. The Royal Navy, the Royal Air Force and the Royal Engineers all have some responsibilities for the clearance of terrorist devices but there is no question that the RAOC leads in this subject.

However, during the war years and those immediately following, the term bomb disposal conjured up images of unexploded air delivered bombs and parachute mines, and the heroic work carried out by personnel of the Royal Navy and the Royal Engineers to render these weapons safe. Indeed, articles in *After the Battle* and in the three volumes of *The Blitz Then and Now* tend to reinforce the idea that the Navy and the Army were the only two Services involved in bomb disposal.

This is far from the truth and this article is written to try to restore the balance and illustrate the work carried out by the Royal Air Force bomb disposal units throughout the Second World War and by their EOD successors in post-war years. These units worked not only in the UK but wherever British Servicemen were deployed, including the trouble spots of the Middle East and the Falklands. It is not always realised that Royal Air Force personnel recovered the first German unexploded bomb to fall on the UK during the Second World War; set up the first bomb disposal school and won the first George Cross for bomb disposal operations.

One aspect of current Royal Air Force EOD work which rarely gets any publicity is the clearance of unexploded and frequently very dangerous, bomb-loads found during the excavation of crashed aircraft. One such event occurred in a Sussex wood during 1989 when possibly the largest post-war find of Luftwaffe bombs was recovered from the site of a crashed Dornier Do 217 E4. Thus the history of Royal Air Force bomb disposal stretches the full fifty years from 1939 to 1989 and looks set to continue into the foreseeable future.

How did it all begin? The Royal Air Force was well aware that bombs could, on occasions, fail to explode and the responsibility for dealing with such bombs, on its own bombing ranges, fell to the Senior NCO armourers. Consequently, in 1939 when it was perceived that a threat might exist from enemy unexploded bombs it was accepted as a matter of course that these same armourers would deal with them.

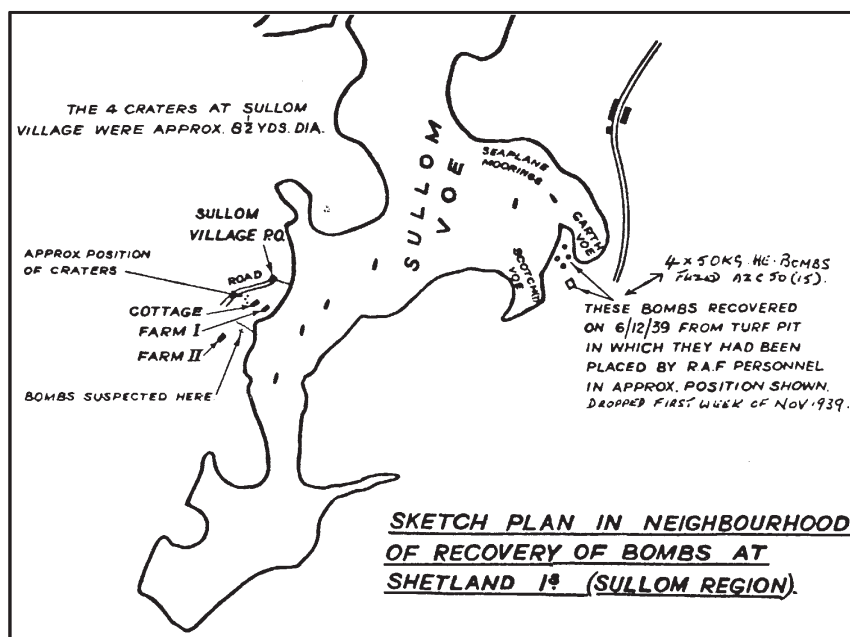
In common with the other Services and indeed the Home Office, it was generally accepted that unexploded bombs would either be destroyed in situ or taken away and demolished. Thus the first Royal Air Force bomb disposal units were, like their Royal Engineers contemporaries, known as Demolition Sections or, in the case of the Army, Demolition Teams. Little was known of the types of fuzes likely to be encountered although one had been recovered from a bomb dropped on RAF Sullom Voe in the Shetlands on November 6, 1939.

It was not until the first German bomb had dropped on mainland Britain, near Canterbury on May 10, 1940, that action really began and the War Office accepted full responsibility for the disposal of unexploded bombs. At a meeting held on August 27, the inter-Service responsibilities were defined

Top: Largest bomb ever tackled by the Royal Air Force, and probably the largest bomb neutralised by any bomb disposal unit, was one of their own! The 12,000lb 'Tallboy' was believed to have been dropped by Bomber Command on October 15, 1944 on an operation against the 760-yard-wide Sorpe dam. When part of the reservoir was drained in 1958 the bomb was found in ankle-deep mud and snow at the base of the dam. The work of removing the three No. 47 half-hour delay fuzes was shared by Flight Lieutenant J. M. Waters, OC 6209 Bomb Disposal Flight at Butzweilerhof, and Herr Walter Mitzke, a West German BD specialist, assisted by Corporal Technician F. Smith and Corporal A. Mowatt. The British chemical-delay fuzes were (and are) the most hazardous types of Allied or enemy bomb fuze as there is no way of determining just how far the acetone has dissolved the celluloid disc retaining the striker. The final extraction of the Sorpe bomb fuzes was completed on January 6, 1959 with a public commendation from the then Prime Minister, Harold Macmillan.

and have remained largely unchanged ever since. The Royal Air Force was made responsible for all unexploded bombs on air force property, all unexploded British (later to include Allied) bombs, and all bombs of whatever nationality found on or adjacent to crashed aircraft. The Admiralty was made responsible for all unexploded bombs on its property and all underwater weapons, and the Army was responsible for all other unexploded bombs, i.e. those on Army property and all enemy bombs not on Admiralty or Royal Air Force property or on crashed aircraft. Minor alterations have been

The first UXBs. It was the Royal Air Force which recovered the first unexploded bombs of the Second World War in December 1939 following the raid on the Shetlands on November 13 (compare this contemporary plan with *After the Battle* No. 67, page 10, and see also *The Blitz Then and Now, Volume 1*, pages 48-49). After examination of the fuzes, it became clear that bombs could so be dropped that they remained alive and dangerous, even though they had not functioned. In addition, it was realised that time-bombs and bombs with booby-trap fuzes might be dropped deliberately. The Ministry of Home Security declared its inability to create the organisation for the disposal of unexploded bombs, chiefly on the grounds that a disciplined force would be needed for the purpose. Accordingly, at a meeting held at the Treasury on February 2, 1940, the War Office agreed to examine the necessary organisation which would be required. It was later decided that the War Office should assume general responsibility for dealing with unexploded bombs, while the Admiralty and Air Ministry would be responsible when such missiles fell within the precincts of their own establishments.



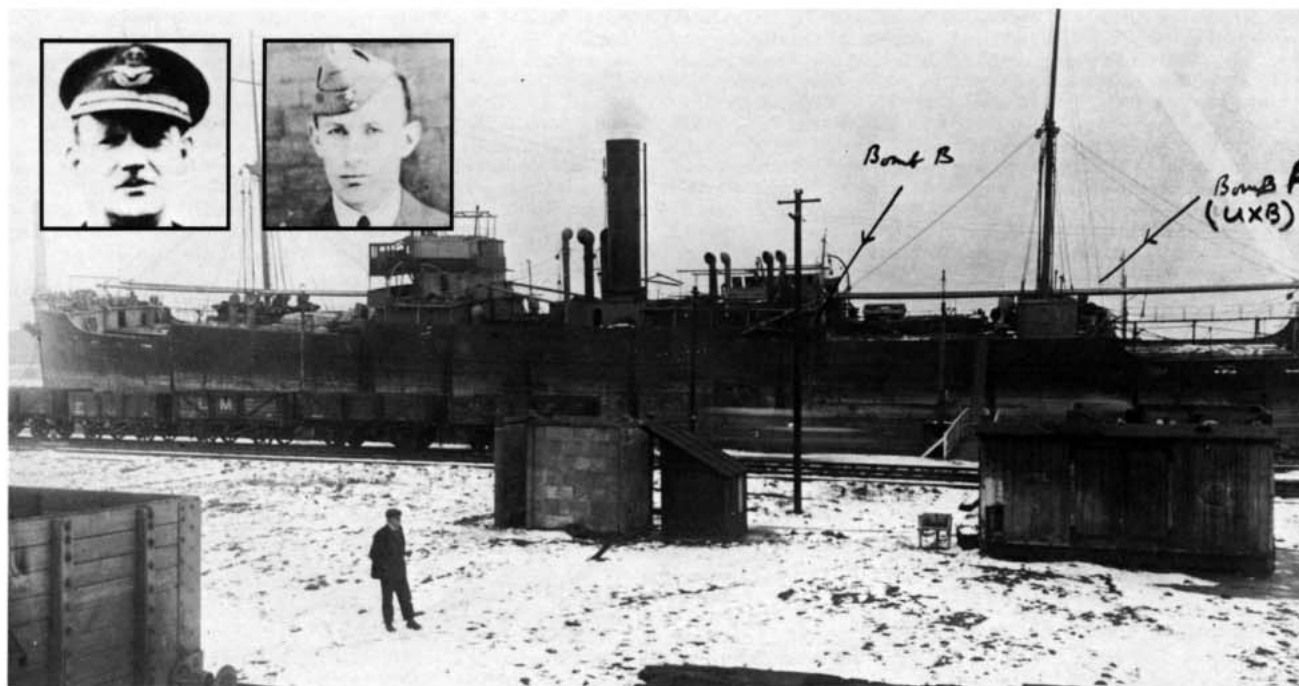
made to more closely define responsibilities but those first laid down in 1940 have stood the test of time.

As the training of bomb disposal and later EOD personnel of the three Services grew more similar there was a blurring of responsibilities. For example, during the war parachute mines were occasionally dealt with by the other two Services although technically a naval responsibility. Similarly today, a Service's responsibility for a particular incident

may be met by agreeing that another Service, called to the site before the item was identified, should continue with the operation.

Returning to the early days of May 1940, there were then 80 Royal Air Force Demolition Sections in existence based at the more important airfields, called 'X' (for explosive) Stations, but with only the most primitive equipment and minimal additional training to that already received as an armourer. By September of that year the Royal Air Force

Armament School had established a five-day bomb disposal course to teach what was currently known of German bombs and fuzes and the 80 Demolition Sections had been supplemented by a number of mobile squads. By then, too, bombs had been found with long delay and anti-withdrawal fuzes and a host of fiendish combinations. Thus these groups of brave men were no longer Demolition Sections but Bomb Disposal or BD Squads.



When the George Cross was instituted by Royal Warrant on September 24, 1940 'only for acts of the greatest heroism or of the most conspicuous courage in circumstances of extreme danger', the first action to merit the award was by RAF bomb disposal personnel and occurred earlier that year. Back in February the grain carrier SS *Kildare* had been hit by two bombs off the north-east coast. One bomb exploded on the deck, killing six men and causing a heavy list, although the ship managed to limp into the Humber where she tied up at Immingham Docks (above). On February 12, an Air Ministry civilian armament instructor, Mr Leonard Harrison, (who had previously served a 12-year commission in the RAF from 1922-34) (inset left), with Flight Lieutenant John Dowland (inset right), and Mr W. C. Thompson as assistants, arrived to find the

second bomb in the after deck cabin having been wedged with mattresses by the ship's crew to stop it rolling about. Mr Harrison particularly had some knowledge of the type of German fuze fitted as used in the Spanish Civil War, and its electric charge was checked using a voltmeter, after which the fuze locking rings were removed using the handles of pair of pliers as a key. The fuzes were prised out with a penknife before the bomb was rolled over to remove the lethal picric booster charge. The award of the GC was announced in the *London Gazette* to Mr Harrison on January 3, 1941, and to Flight Lieutenant Dowland three days later (who subsequently lost his life in Malta in January 1942). Leonard Harrison rejoined the RAF in 1941 and retired in 1949, later becoming the Honorary Treasurer of the VC and GC Association.



Within weeks, large-scale aerial attacks on Britain had begun, vastly increasing, as far as bomb disposal personnel were concerned, the technical problems which had to be solved. Fuzes were introduced which incorporated anti-handling devices and new and larger types of bomb and parachute mines were employed. (For technical details of German bombs, the reader is referred to *The Blitz Then and Now, Volume 1*.) Even when the All Clear sounded, it no longer meant that the danger had ceased, as delayed-action bombs would continue to explode for three or four days. The gravity of the problem was emphasised in the direct orders of the Prime Minister: 'The rapid disposal of unexploded bombs is of the highest importance. Any failure to grapple with this problem may have serious results on the production of aircraft and other vital war

material. The work of the Bomb Disposal Squads must be facilitated by the provision of every kind of up-to-date equipment.' It was Flight Lieutenant (later Squadron Leader) Eric Moxey (*inset*) who invented early versions of fuze dischargers and remote fuze extractors. In this picture (*above left*) a fuze is being withdrawn from a 250kg German bomb on an airfield. On August 27, 1940, two UXBs were reported on Biggin Hill aerodrome. Squadron Leader Moxey immediately volunteered to tackle them. He had already risked his life many times and, as a Technical Intelligence Officer at the Air Ministry, was well aware of the dangers. However on that Tuesday luck was against him and one of the bombs exploded. *Right*: Buried in the churchyard of St Peter and St Paul, Cudham, Orpington, Kent, he was posthumously awarded the George Cross.

Throughout this early period the Squads received all their technical control direct from the Air Ministry and this method of control was to continue until April 21, 1943. On that date a formal organisation was established consisting of a Wing Headquarters commanding six BD Squadrons

each of between four and six Flights, a total of 29 Flights.

During the early days of 1940 and 1941 the officers responsible for the technical control were no desk-bound staff officers but ones who went out and experimented with the more difficult bombs and their fuzes and

devised equipment for dealing with them. From 1939 to May 1941, the Royal Air Force BD organisation dealt with 1,512 enemy bombs and the specialist Air Ministry officers dealt with a further 114. None of these totals include bombs recovered from crashed aircraft, German or British.



It was exactly two weeks earlier that the first German clockwork long-delay fuze (Type 17) had been recovered which was found could give any delay up to 72 hours. Whether it was a Type 17 that killed Eric Moxey one can only speculate, but it was quickly established that a strong magnetic field was sufficient to stop the mechanism. The first type of 'clock-stopper' quickly introduced to deal with the new menace was a cumbersome design in which a large coil powered from bulky accumulators produced an intense impulse for a few seconds sufficient to stop the clock. However, experience showed that it could easily restart if disturbed so a Mk 2 design called 'Kim' was designed around a pot magnet which could be energised continuously. Over 700 Kims were issued and it is claimed that it never failed once, whereas before its introduction over 50 percent of all accidents had occurred with the Type 17 fuze. *Left*: Here Flight Sergeant Fuller of 25 BD Squad (*right*) lowers Kim into a bomb shaft.

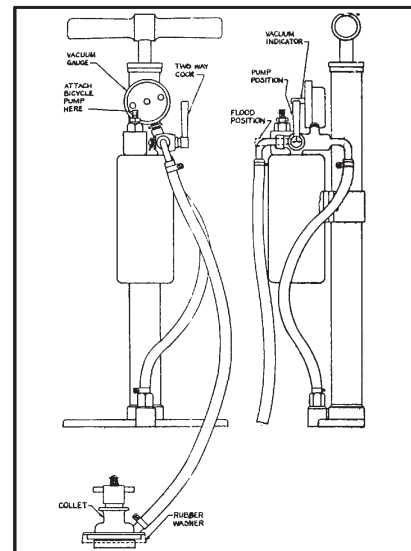




In charge of all RAF bomb disposal throughout the war was Wing Commander J. Stevens, seen here on the extreme right at the Air Ministry 'bomb cemetery' which had been established at Upminster. One of his inventions was appropriately christened the 'Stevens Stopper' (right), the purpose of which was to stop a ticking No. 17, 17A or 17B German clockwork time fuze, or to render a non-ticking clock unable to start regardless of vibration and movement. First of all the air was evacuated

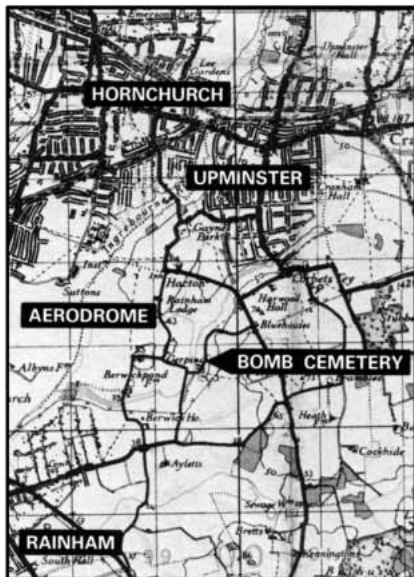
This latter aspect of the responsibilities of the Royal Air Force BD organisation imposed a heavy and dangerous load upon the organisation. It is sometimes forgotten that the British and later the American bomb fuzes were just as treacherous as those of the enemy, if not more so, and throughout the war by far the largest number of unexploded bombs dealt with by the RAF in the UK were of British or American origin.

Apart from the UK, Royal Air Force BD units were deployed wherever there were airfields likely to be attacked or from which attacks were launched. These ranged from North Africa, Malta, the Far East and later, as the tide turned, up through Italy and in 1944, across the Channel with the invasion forces. Their expertise was taken wherever it was needed. Perhaps one of the most unusual examples was that of Flight Lieutenant



from the fuze pocket. Then a suitable liquid was drawn into the pocket after which pressure was applied to the liquid by the pump to ensure its penetration to the clock, ultimately jamming the works. Also in the picture taken in 1941 is the OC of 25 BDS at Hornchurch, Flying Officer K. M. Scammel (second left) and Flight Lieutenant J. S. Rowlands (later Air Marshal Sir John) who was awarded the George Cross in 1943 for the operation at Snaith (see page 39).

Wilson Charlton who, having been awarded a George Cross as a Warrant Officer for bomb disposal duties in Gloucestershire and Wiltshire during August/September 1940, was next reported in 1941 in the interior of China. Here he gained valuable information on Japanese bombs and fuzes. He was back in Singapore when the island was captured and spent the next three years as a prisoner-of-war in Java.



The RAF bomb cemetery at Upminster occupied wasteland and sand pits opposite Gerpins Farm in Gerpins Lane in a remote district east of Hornchurch airfield, where experimental and investigative work could be carried out in relative safety. It was under the nominal control of 25 Bomb Disposal Squad at Hornchurch — later 6221 Flight — and it was here that an unfortunate accident was to take the life of its CO. The nasty little 2kg Splitterbombe SD2 — better known as the Butterfly bomb — had already cost the lives of many bomb disposal personnel as the slightest disturbance would set the thing off. It hung up in trees and on roofs, and up to October 1940 none had been recovered, all those found being dealt with by .22 rifle fire or jerked on a long string as they were lethal up to 70 yards. Thus none were available for instructional purposes . . . that is, until Sergeant Cann and 2nd Lieutenant Taylor, RE, of 8 BD

Section of 4 BD Company, RE, found a number in the Ipswich area on October 28. Noting that some of the arming rods had only partially unscrewed, they very bravely screwed the rods back into the fuzes, enabling experts to dismantle and preserve them for instructional purposes. Flight Sergeant Handford was awarded the British Empire Medal for a similar feat at Harlaxton ten months later. There never was (or is today as the bombs still turn up in woods or lofts) a safe method of defuzing the Butterfly, and it was a tragedy when one exploded at the Upminster site on November 27, 1956 as it was being examined by Flight Lieutenant Herbert Dennington, who had been OC 6221 Flight in 1947 and again in 1956. He was rushed to Oldchurch Hospital but died of his injuries the same day. After Hornchurch closed in 1962, the bomb cemetery was evacuated, the site having since being infilled as a refuse dump (right).



When the UXB Committee took over research on bomb disposal in April 1940, one of its tasks was to find the best method of opening a bomb case to give access to the main high explosive filling. Cutting with acid and oxy-acetylene proved too dangerous, the most successful method, and the one still in use today, being a hole-cutting machine which could be worked by remote control. The first model bored a 1½-inch diameter hole through which a steam pipe could be introduced to melt the TNT which was forced out through a second pipe. A number of these 'trepanning' and boiling out plants were produced, including a non-magnetic version for use on magnetic mines. It was then realised that if a larger diameter hole could be cut, then the whole fuze pocket could be removed if necessary. This was the Pass trepanning machine, seen *left* being inspected by



Wing Commander Stevens at Upminster. On December 12, 1941, his T.Arm.4 branch at the York House Air Ministry building received a telephone call from Lieutenant Bourne of the Royal Engineers BD Squad at Brentwood asking for RAF assistance to remove a damaged No. 28 fuze complete with the fuze pocket from a 1000kg Hermann. Squadron Leader H. Dinwoodie (who was later to be awarded the George Cross for disarming 11 bombs in Lübeck in August 1945), accompanied by Flight Sergeant Fuller and ten men from Hornchurch, went to the scene with a Pass trepanner for one of its first outings. The complete fuze pocket was successfully removed and was later checked out by Flight Lieutenant Rowlands. So successful was this first operation that it was repeated to be photographed for instructional purposes (*right*).

From D-Day onwards a relatively large number of Royal Air Force BD personnel were deployed with the Second Tactical Air Force and eventually were spread throughout France, the Low Countries and Germany. Forty-two Royal Air Force BD personnel actually landed on D-Day with the invading forces and were quickly followed by more, until some 400 in 12 BD Flights were deployed clearing up the debris of war. They dealt not only with enemy and Allied bombs which had failed to detonate when dropped, but also with captured enemy bomb dumps which, more often than not, were cleverly booby-trapped and had to be cleared before the airfield on which they were sited could be made operational.

Of course, they also had the continuing responsibility for the clearance of bomb 'hang ups' on returning aircraft and the clearance of bombs from crashed aircraft. As part of this aspect of their work, they were frequently called to the crash sites of aircraft which were under investigation by the Royal Air Force Missing Research and Enquiry Units.

By VE-Day, it was calculated that Royal Air Force bomb disposal units had dealt with some 84,000 weapons in the UK and 92,000 in mainland Europe. Of the former, a large proportion had been British and Allied air dropped weapons either jettisoned in an emergency or recovered from crashed aircraft.

Once the fighting had stopped in May 1945, there began the vast disarmament operation involving the physical disarming of the Luftwaffe in the field. The organisation for this work had been planned prior to D-Day and eventually it involved more Royal Air Force BD personnel than during the actual fighting. Over 8,000 airmen of all ranks took part, of whom 790 were BD personnel organised into 21 Flights. This was a hazardous undertaking as instanced by the death of ten BD personnel during the operation. Between May 1945 and June 1947 the Royal Air Force BD units disposed of

163,000 tons of HE bombs, 13,500 tons of pyrotechnics and 195,500,000 rounds of ammunition.

From then on, Royal Air Force BD units,

like those of the other Services, were dramatically cut. 'Nobody is dropping bombs so there is no requirement for bomb disposal' was the fallacious argument. Defence cuts



The history of bomb disposal is studded with incidents where one can really say that lives were unselfishly sacrificed so that others might live. It was in Northern Ireland near RAF Aldergrove that another lesson was learnt the hard way in July 1941. The tragic train of events began when it was decided that a previously filled-in shaft should be reopened to establish whether fragments found were from a German tail fin or a bomb. At about noon on July 21, Corporal H. Burton was working in the shaft when the soil suddenly collapsed and he disappeared into a cavity created by a 'camouflet' where a bomb explodes underground without breaking the surface. He made a vain attempt to climb out but was overcome by carbon monoxide gas from the trapped explosive fumes and fell back down. Courageously, Sergeant A. W. E. Boulden was lowered into the cavity but he too was overcome and could not be pulled out quickly enough, despite the frantic efforts of the rest of the squad. *Left:* Photo taken later to illustrate the difficulty of extracting the men from the small hole. *Right:* Following these two deaths, a modified parachute harness was developed to be worn in every case where a camouflet was suspected.



and rationalisation programmes all took their toll and by 1965 the Royal Air Force BD organisation had been reduced to just two flights. Two years later, on January 16, 1967, these two Flights were absorbed into the establishment of the Maintenance Units with whom they had been co-located since 1965. Thus the last of those Flights established in 1943 faded into history.

However, all was not lost. The flight numbers had gone but the personnel remained and continued with the apparently never-ending task of bomb disposal. Whether it was the clearance of bombs from Royal Air Force property and ranges in particular, or the emergency call-out to deal with a British or Allied bomb uncovered in some unexpected place, the teams were kept fully employed. Training too was changing and instruction concentrated more upon the weapons of NATO's potential enemies. Once again it was appreciated that bomb disposal (or EOD as it was now) was an essential requirement wherever the threat of air attack existed. Thus by 1975 the BD personnel of the two Maintenance Units became Nos. 1 and 2 EOD Units relocated at the RAF Armament Support Unit, RAF Wittering.

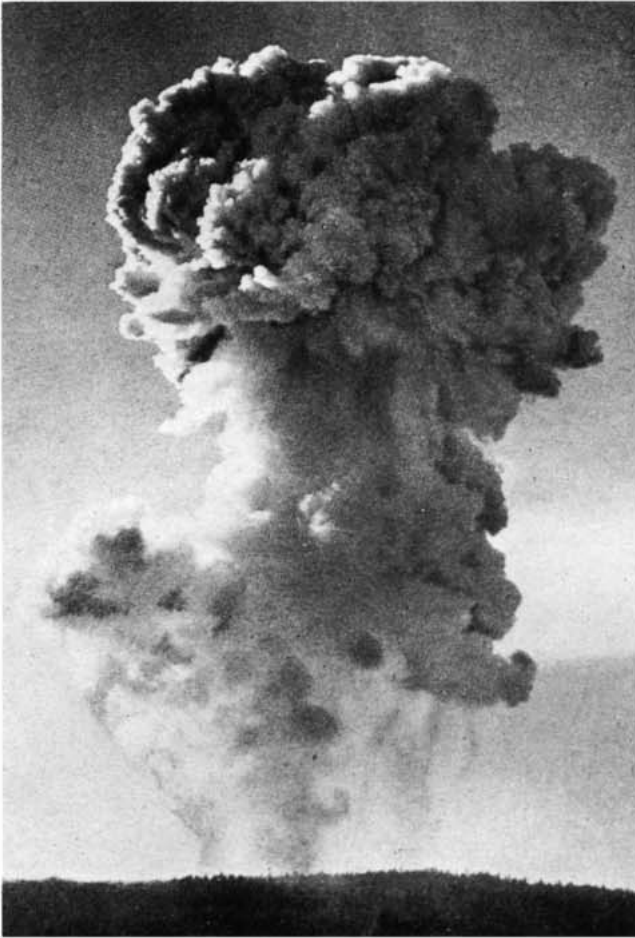
Further development and an increase of manpower and equipment in the late 'eighties has now resulted in the formation of an EOD Operations Flight, Training Flight and a Development Team. All Royal Air Force operational airfields also have personnel trained and equipped for EOD operations but as a secondary rôle.

Throughout these changes Royal Air Force BD personnel have been involved in operational work not only in the UK but also overseas and have seen action in Suez, the Indonesian confrontation, Cyprus and, more recently, the Falkland Islands. Thus into the 1990s the Royal Air Force EOD organisation continues to be a valuable and integral part of operational support for both the Royal Air Force and NATO.

Regular day-to-day duties are area clearance tasks, destruction of surplus or unserviceable explosives and, probably the most significant of all, support for weapon

Shortly after the reorganisation of the RAF BD Squads into Squadrons and Flights in April 1943 came one of the worst bomb disasters in Britain. On Saturday, June 19, the Duty Officer at Air Ministry O.10(BD) (as T.Arm.4 had been renamed in July 1942) was telephoned by Squadron Leader H. H. Apted, OC of the newly-formed No. 5131 BD Squadron at Snaith, Yorkshire, to report that a serious explosion had occurred in the station bomb dump, with 18 men missing. John Rowlands, now a Wing Commander, who was then visiting RAF Sealand, hurried to the scene. A recce of the bomb dump showed some dead bodies and bombs scattered about, the latter already fuzed for operational use with a mixture of the sensitive No. 37 long-delay and No. 845 anti-movement fuzes. Many incendiaries had caught fire and the heat was still intense. It was decided that some days should be allowed to elapse to give some sort of safety margin before Wing Commander Rowlands, assisted by Flight Lieutenant Wilson and Squadron Leader Apted began the clear-up. By June 29, by a combination of remote control fuze removal and the deliberate detonation of damaged bombs, the site was declared safe. For this operation and conspicuous courage in bomb disposal over two years, Wing Commander Rowlands (*inset*) was awarded the George Cross.





With the termination of hostilities, the largest job of all befell the RAF bomb disposal organisation which became responsible for the clearance of the huge stocks of German Air Force ordnance on the Continent. The 'Dissolution of the Luftwaffe', as the overall operation was called, is far too large a subject to be studied here in detail, but some idea of the size of the task is shown in the statistics: 161,088 tons of explosive ordnance, 28,088 tons of chemical weapons (invariably dumped at sea) and 4,370 V-weapons. Most bombs were transported to suitable areas for wholesale demolition. Here 100 tons is seen exploding from a distance of 2 miles. During the Air Disarmament programme ten airmen were killed and nine injured.



Possibly the worst problem faced by RAF BD on the operation was at Steenockerzeel on the outskirts of Brussels. There some 700 tons of aircraft bombs had been booby-trapped with 22 bombs armed with No. 17 delay fuzes fitted with Zus 40 anti-withdrawal devices. Moving the bombs as they stood was considered too risky, yet the thought of defuzing them inside the huge bomb dump was equally daunting. Nevertheless Wing Commander Harrison (of *SS Kildare* fame), assisted by Squadron Leader T. M. Clark, came out from London and spent three weeks in February and March 1946, in atrocious winter conditions of snow and ice, defuzing the 22 bombs where they lay — an outstanding feat in the annals of bomb disposal.

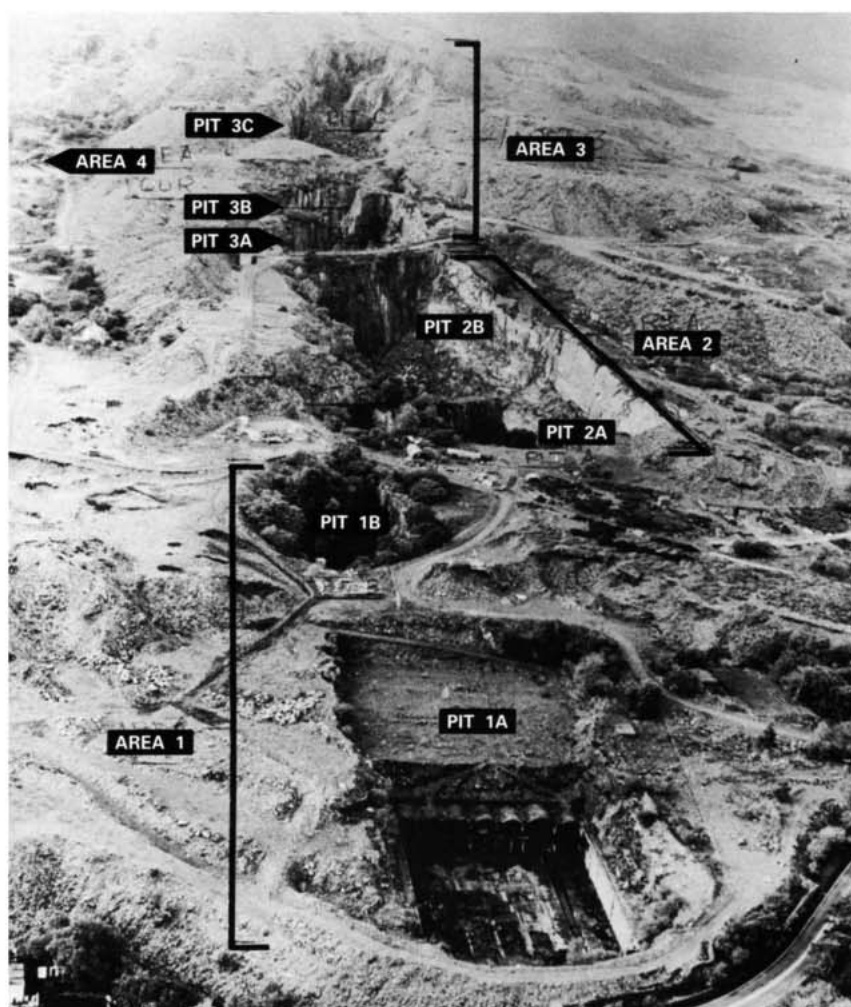
development trials and research projects. Range clearance often features as part of this supporting rôle and the modern BL 755 Cluster Bomb and JP 233 Airfield Denial weapon systems have identified and highlighted problems to be overcome in developing reconnaissance, search and disposal procedures in order to ensure that front line airfields remain operational in the event of attack.

Routine EOD work is by nature a low profile operation and on occasion when it does become high profile it is usually because something has happened which necessitates the evacuation of people from their homes or the disruption of traffic flows. Even now, many years after they were dropped or laid, World War II, or even World War I, unexploded weapons can still be potentially lethal and on occasion disruption is caused to the civil population whilst they are being rendered safe. This disruption generates a far greater media interest than the story of the actual men involved, the skills being used and frequently the risks being taken. For



Right: The largest — and longest — clearance job in the United Kingdom took place in the disused slate quarries at RAF Llanberis in North Wales which had first been opened as an explosives storage depot in May 1941.

RAF Llanberis was under the control of No. 31 Maintenance Unit, the 70-acre site extending over several old quarries and interlinking tunnels used for bomb storage. Early in 1942 one of the tunnels collapsed, burying over 8,000 tons of bombs, not all of which could be removed. Then in 1943 the RAF School of Explosives moved in and, as the school curriculum included the destruction of explosives, large quantities were sent to Llanberis for demolition or burning, over 250,000 incendiary bombs alone arriving for destruction over the next 18 months. By the time the complex finally closed in July 1956 every type of explosive item had been sent there but not all had been destroyed. Some of the dumping had been indiscriminate and much ended up on ledges and slate outcrops and still more was now submerged in the lakes which had formed in the quarries after the war. By 1969 it was realised that the situation could no longer be ignored and a massive clear-up operation was put in hand by No. 71 MU EOD Flight (later renamed No. 2 EOD Unit) which lasted for the next 6½ years. Because of hazards associated with the project, a casualty evacuation plan was instituted. A radio link was established between Llanberis and RAF Valley so that in the event of an accident, medical aid and a Casevac helicopter could be summoned immediately. The RAF Valley Mountain Rescue Team instructed the Llanberis contingent on the various rock climbing techniques and rescue procedures so that ledges could be cleared of explosives and the cliff sides could be closely inspected for signs of imminent rock falls. Demolition of HE in particular made the possibility of large rock falls all too real. The site was divided into four main areas or quarry pits and within two of them were three further sub-divisions. Wing Commander John MacBean, the unofficial historian of RAF bomb disposal, records that: 'Progressively, from 1969 onwards, the various pits and tunnels were cleared, and all the time the Team was burrowing further and further into the debris and rubble, winking out all sorts of ordnance and particularly such items as incendiary bombs and detonators for HE bombs. Both the latter and numerous bomb fuzes uncovered were in an extremely hazardous condition. Perhaps the proudest achievement was the reopening of a tunnel to gain access to what was an almost inaccessible pit, using picks, shovels, and muscle. Mechanical shovels and dumper trucks were also used. Pit No. 1 was the



original storage area and this was declared safe in May 1970. This was followed by Pit No. 4 in March 1972, and Pits Nos. 3A and 3B in November 1972. Pit No. 3C, which was finally tackled towards the end of the task, presented the awesome job of clearing about 3,000 tons of explosive and incendiary magnesium slag nearly 90 feet high which was liberally interspersed with live detonators, fuzes, and miscellaneous explosive items. Naval frogmen, who were co-opted to investigate the contents of a large lake in Pit No. 2C, reported the presence of large quantities of derelict explosives including bombs and, subsequently, some 20

million gallons of water and sludge were pumped out. By April 1973 the lake was emptied, revealing the naval men's worst fears, and it took a further two years of hard labour to recover and dispose of its contents. Fortunately, 38 Engineer Regiment, RE, had constructed a road into the pit, otherwise the job would have been impossible. At a conservative estimate, No. 71 MU EOD Team had shifted about 85,000 tons of slate and debris, recovered and disposed of 352 tons or 121,420 items of explosives together with 1,420 tons or 213,881 items of ordnance debris between mid-1969 and October 1975 when the project finally came to an end.'



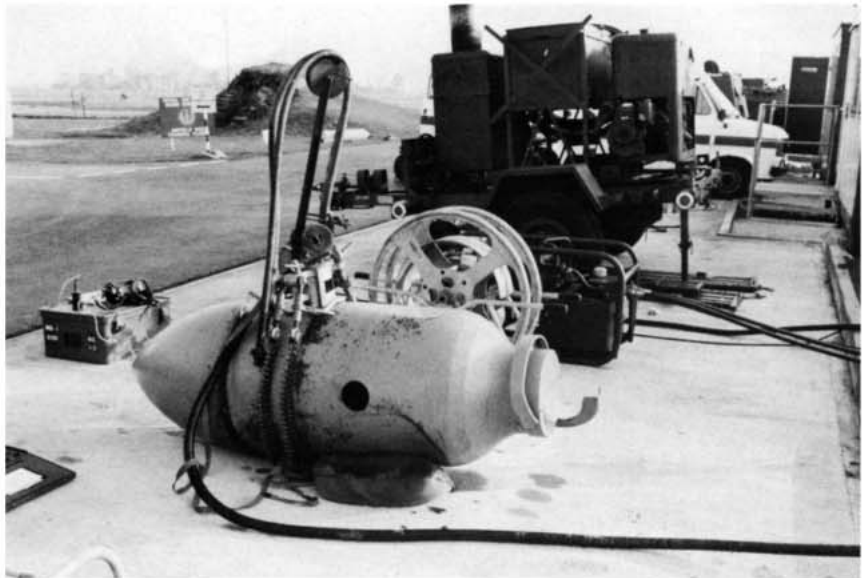
Left: Incendiaries by the bucket-load. Right: Not all were RAF bombs — these are US 100lb high explosive M30s.



example, the discovery in 1989 of two unexploded German 50kg bombs during the construction of the new Thames crossing at Dartford resulted in massive disruption with the lengthy closure of the nearby M25 and Dartford Tunnel. National attention was focussed on these two episodes and, consequently, the work of the Royal Engineers EOD team. Meanwhile, however, a Royal Air Force EOD team was dealing with a cache of German bombs in a Sussex wood. In terms of weight it proved to be the largest post-war find of Luftwaffe bombs, its composition and weight potentially more dangerous and destructive than the Dartford finds. Yet their discovery and neutralisation led to little more than a passing mention in the local press and just a brief reference to the episode on a regional TV news programme!

The following is the historical background to the find in Sussex and an account of the work of the Royal Air Force EOD Operations Flight based at RAF Wittering.

With the boom in aviation archaeology across Southern England in the 1970s, one of the many promising sites investigated was the crash of a Dornier Do 217E4 in woodland at Fernhurst, West Sussex, where it had been shot down on the night of March 7/8, 1943 by a West Malling-based Beaufighter of No. 29 Squadron. The Dornier had dived into a wood where much of the wreckage had become buried on impact and it was in 1978 that it became the subject of investigation and excavation by the then Southern Area Wartime Aircraft Preservation Society. During these operations, involving pick-and-shovel digging in the dense woodland, a variety of items were unearthed and it became clear that a considerable amount of material remained buried on site, including airframe components and probably both engines. More disturbing, however, were indications that at least one of the crew members may not have escaped from the aircraft before it crashed and, additionally, that there was every possibility of unexploded bombs being present. Indeed, smooth cylindrical objects which were revealed in the side of the excavation had all the indications of being bombs. At this stage, however, the operation was abruptly halted when it was unfortunately discovered that the site was in fact on the property of an adjacent landowner to the person from whom permission had been obtained! Although the team had acted in all good faith, the landowner was none too impressed with what she found going on in her woodland, ejecting the group and following up her actions with a solicitor's letter — threatening dire consequences if the site was interfered with again.

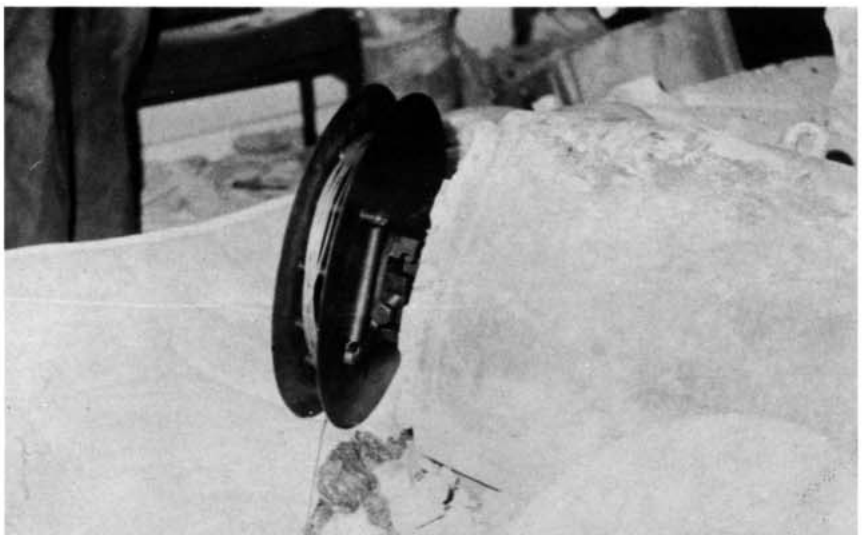


The 1000kg Hermann (approximately 1 ton) is the largest German bomb to have been defuzed by the RAF in Britain. Left: This is the first one recovered after the war — from Renfrew in November 1946 — and now displayed at RAF Wittering, the present-day base of RAF EOD. Right: The most recent Hermann to be tackled was the one which originally formed part of the mixed bomb load on the first Junkers 188 to be brought down in Britain in October 1943, the bombs finally being recovered in August 1987 (see *The Blitz Then and Now*, Volume 3, pages 300-307).

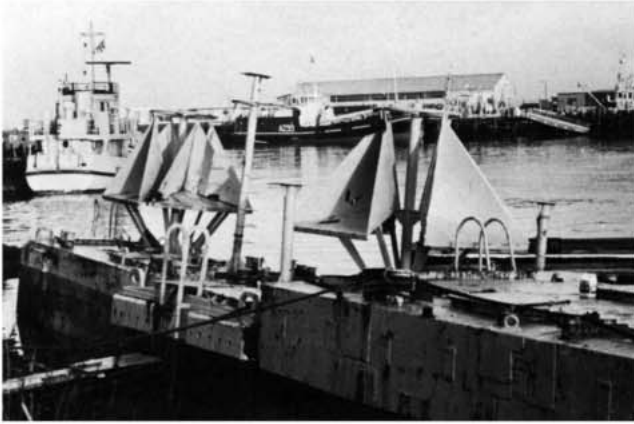
There the matter rested until, in 1988, some of the items recovered from the 1978 dig were produced at the Tangmere Aviation Museum. Among these artefacts was a rusted, twisted piece of sheet metal clearly identifiable as part of the fin from a 50kg Sprengbrand bomb. Such a find would indicate the likely presence of unexploded ordnance, although wartime police reports of the crash certainly indicated that at least some of the bomb load had fallen elsewhere and away from the main impact point. A matter of yards away from the crash itself three unexploded bombs plus an incendiary 'fire pot' and 100 incendiary bombs had been found, whilst in a meadow adjoining a nearby copse four high explosive bombs and

200 incendiary bombs had fallen but caused no damage. Unfortunately the size of these weapons was not recorded and thus it was impossible to calculate the likely load of the Dornier remaining in the wreckage.

In any event, such an exercise was purely academic as the site remained the property of the same landowner and since the first dig the 'Protection of Military Remains Act' had also come into force, requiring the granting of a licence from the Ministry of Defence before any excavation started. Such a licence would clearly not be forthcoming in this case as the presence of both human remains and bombs was suspected and highly likely. A further investigation of this crash site was thus out of the question.



The Second World War is not the only source of unexploded ordnance which has occupied RAF personnel as this example illustrates. During the Turkish invasion of Cyprus in July 1974, the First Line EOD Team at RAF Akrotiri was called out to deal with UXBs left over from air attacks by F-100 Super Sabres, F-104 Starfighters and F-84 Thunderstreak aircraft of the Turkish Air Force. The most unusual incident was at the Venus Beach Hotel in Famagusta where an American-made 750lb bomb was found reclining across two single beds on the sixth floor! Flight Lieutenant Ted Costick identified the fuze as one very susceptible to jarring, but he successfully removed it using the Fuze Extractor Mk V, colloquially known as 'IGOL', receiving the Queen's Gallantry Medal in January 1975.



Other post-WWII tasks for RAF BD range from certifying that steel barge bombing targets are free of explosives . . .



. . . to recovering empty bomb cases from a beach in Scotland, or mortar ammunition and other armaments in the Falklands . . .



. . . to blowing the wheels off redundant Vulcan bombers! This is the forte of Flight Sergeant John 'Slim' Coleman — a man

who obviously enjoys his job of converting multi-million pound hardware into carcasses to be used for fire drills.





Following your Editor's long researches into German crashes in the UK for *After the Battle's* Blitz project, it became obvious that the wrecks of certain aircraft, usually those shot down before reaching their targets, would probably still contain bombs. This was discussed with Wing Commander Keith Hopkins, who currently looks after RAF bomb disposal operations at the Ministry of Defence, and he expressed interest in following up any leads we could give him. Four sites were suggested, all of which yielded positive results. The first was in

a bluebell wood at Fernhurst, Sussex, where a Dornier 217 had come down in March 1943. *Left:* This is a picture taken during Keith Hopkins' recce of the crash site on April 26, 1989. He had first visited the spot to liaise with the landowner three weeks earlier but in between someone had already jumped the gun as he found aircraft wreckage already strewn about. *Right:* A more detailed investigation was carried out on May 10 by Flight Lieutenant Jim Shears and Warrant Officer 'Doc' Knights using a bomb probe and 4021 metal detector.

At about this time the Editor of *After the Battle* became aware of an interest by the Royal Air Force EOD organisation to investigate and deal with an aircraft wreck suspected of having a bomb load still on board. He therefore undertook to identify from his researches a possible location for its attention. Initially, it was hoped that the projected operation could be covered as a feature chapter for Volume 3 of *The Blitz Then and Now* and when the Fernhurst site came to light it seemed an ideal choice. Not only would it highlight the work of the Royal Air Force EOD personnel, but additionally, the date of the crash fitted in nicely with the time period covered by Volume 3. Such was the plan but unfortunately, although the eventual operation came within the production period of the book, it was too late to be included, hence publication here.

When the information was passed to the Royal Air Force EOD branch at the Ministry of Defence, it was a surprise to learn that despite the known or suspected presence of live ordnance on a wreck which legally is considered to be 'captured enemy property surrendered to the Crown', the Ministry had no automatic right of access to retrieve the wreck and thus render safe the explosives. Indeed, permission for the recovery had first to be negotiated with the landowner by a representative from the Ministry of Defence (Air). In fact, this negotiation presented no problems and an initial EOD reconnaissance soon identified the water-filled crater strewn with airframe debris which marked the crash site.

A search with a metal detector identified strong readings but, at this stage, there was no way of knowing what these readings indicated: engines, airframe or bombs? All would give strong signals. However, the recovery of more bomb tail fins increased the possibility of discovering bombs on the site. Permission to gain access to the site via adjoining property was sought and readily given. Additionally, of course, there was the worrying question of the missing crew member. Would his remains be found in the wreckage too? Fortunately, a member of an aircraft preservation society had a letter which had been sent to him in recent years by the Dornier pilot (ex-Feldwebel Gunter Vestewig) who wrote:

'In 1948 when I had the opportunity to get in touch with my navigator I asked for a report which I have studied again to refresh my memory in order to give you a precise account.

'My crew and I belonged to 1 Staffel of

I Gruppe Kampfgeschwader 2 and were stationed at Gilze-Rijen, between Breda and Tilburg in Holland. We were the only Geschwader (81 Do 217s) that flew attacks against England but were reinforced by a Gruppe of KG6 (27 Ju 88s).

'We were equipped with the Do 217E4. Its flying qualities were first-class; without bomb load one could almost fly a full aerobatic programme with it. My aircraft was coded U5+EH, W.Nr. 5526. At 22.58 hrs on March 7, 1943 our aircraft took off at two-minute intervals for an attack on Southampton Docks, the attack height was to be 4000m. It was assumed that the large ships of the British Fleet would be docked there and this would mean making a glide-attack. We reached the starting position off the French coast at 1500m ten minutes early, and after passing the time by flying around we set out from the starting point on a northerly heading and climbed to 4000m. We flew over the English coast and went inland in order to reach Southampton on a southerly heading. Suddenly there were sparks in the cockpit and I heard glass breaking. The radio ceased to work and from between the starboard

engine and the fuselage I could see flames which rapidly spread to the engine itself. I turned the aircraft on its head and nose-dived to extinguish the flames, these got smaller but when I pulled the aircraft out of the dive the flames were bigger than before. I could not now keep the 'plane level and we flew in a descending curve to the left. The possibility of reaching the French coast was nil and as the danger of an explosion was very great I gave the order to bale out. My navigator cut the radio cable on my helmet at this time otherwise I would have strangled myself.

'We assumed that we were hit by two bursts of fire from night fighters which would explain the loss of life, the sparks and the shattered glass in the cockpit and, on the other hand, the burning wing. What happened afterwards cannot be reported objectively but the fact is that my radio operator was killed and is now buried in Chichester; my flight engineer has never been found; my navigator was wounded by shrapnel in the nose and chin and his left hand and left knee. I was seriously wounded with a fractured skull, broken ribs and a shot through my shin



The full-scale operation began on August 16 and the team were not to be disappointed. Here WO Knights checks the No. 17 clockwork delay fuze of an SC 500 with a stethoscope for any signs of ticking following its recovery. In the event, this bomb proved also to be fitted with a No. 50 anti-disturbance fuze!



bone. I next remember hanging on my parachute — how it opened I do not know — and feeling that I was gliding high above a well-lit Olympic stadium in Berlin! I was there in 1936 but surely this could not be possible. I landed in a clearing in some woods; every time I regained consciousness I shouted for help, how long this lasted I do not know.

‘Suddenly there were soldiers: one of them took off his jacket and vest and then, pouring tea from a flask on the clothing, cleaned my blood-stained face. I next regained consciousness in a farm where I was lying on a stretcher and an old man with a lamp and with hair down to his shoulders — that was unusual in those days — was saying: “My dear son, my dear son.” Later, I remember lying on an operating table and asking: “Does the leg stay on?” The leg did stay on and I got a replacement shin in silver.’

So, Vestewig’s account confirmed that the aircraft was on its run-in to the target and thus had a full bomb-load on board. Additionally, there was confirmation that one crew member remained unaccounted for. The radio operator, Gefreiter Hans Witkopp, was found in the wreckage and buried at Chichester where he remains to this day. However, Gefreiter Franz Huske, the flight engineer, was still missing. Fortunately, the surviving next-of-kin of Franz Huske (a sister living in East Germany) had been contacted and had given her blessing to the operation going ahead. Thus on August 14, 1989, the Royal Air Force EOD team from RAF Wittering travelled to Fernhurst and began

The operation resulted in the largest post-war haul from a German aircraft wreck. Three 50kg SC Sprengbrand explosive-incendiaries are flanked by two SC 50s, both different types, with their bases towards the camera. Behind are the two SC 500s.

work preparing the site. It had been made clear to them that their responsibility was the recovery of any unexploded ordnance and they had been briefed not to disturb any human remains unless they were in the way of such recovery.

By August 16 work had been completed on the preparations and a locally hired JCB excavator brought in to commence digging operations — the civilian operator later being praised for his ‘sublime faith’ in the EOD team. On the first day of digging, the suspected bomb-load was indeed confirmed, seven bombs being located and recovered from a depth of between 15 and 25 feet. Two 50kg SC HE bombs, three 50kg C50 Sprengbrand incendiaries and two 500kg SC HE comprising the rest of the load. Carefully lifted from the excavation, all had their fuzes examined and all were found to have either a No. 25 or No. 28 electrical impact fuze, except for one of the 500kgs, which contained a No. 50 anti-disturbance fuze protecting a No. 17 clockwork long delay fuze.

Although none of the bombs had been released from the aircraft and thus were not electrically armed they were all potentially dangerous. The picric acid exploders in the fuze pockets were likely to have deteriorated and formed metallic picrate crystals, some of which are highly sensitive to both heat and shock. Thus before any further movement of

the bombs took place they had to be made relatively safe. Additionally the clockwork mechanism of the No. 17 could have become corroded so badly that the clock might be activated by any sudden movement. Should it have started it could run for a few minutes or even hours before it caused the bomb to detonate. This too would have to be treated and thereafter a regular stethoscope watch maintained to ensure it had not been activated.

Completion of the disposal procedures at the crash site was found to be impossible because of the close proximity of habitation and the potentially hazardous nature of the task of trepanning the bomb cases, steaming out the explosive and finally burning it. Consequently, thanks to a very co-operative farmer, an isolated location was identified which fulfilled the necessary safety requirements. Thus, with the help of the local police, all the bombs were transported to this location having been first made safe for transportation. As an additional safety measure the 500kg bomb with the No. 17 fuze was moved separately with a regular microphone stethoscope watch.

Once at the trepanning and steaming out site, all the bombs were dealt with between August 22 and 25, a total of 3,000 gallons of water being used in the process. A continuous supply from a hydrant had to be guaranteed by Southern Water because it might



Steaming out the 500kg — the trepanner cutting head can be seen in the foreground.



Steam is produced by the diesel-engined Wickham Universal with its 455-litre water tank.



In the dry summer of 1989, Swanbourne Lake in the grounds of Arundel Castle in West Sussex dried out to reveal a 50kg bomb on the mud which must have lain on the bed of the lake ever since a Ju 88 of KG54 crashed there on August 13, 1940 (above). As the Royal Engineers had first been called to the incident, it was decided they should continue with the recovery, although strictly speaking it came within the jurisdiction of the RAF as laid down in the standing instructions for EOD disposal in Britain. The bomb was dealt with by the simple expedient of blowing it up in situ.

prove dangerous if the process was stopped and then restarted. All that then remained was for the steamed out explosive to be burnt and those items still retaining explosive to be demolished.

With the task completed, the crash site excavation was back-filled and the large quantity of recovered wreckage was reburied at the site, including, at the request of the landowner, one of the BMW 801 radial engines. No trace of the remains of Franz



Huske was found during the task, but to remember this missing airman the Royal Air Force EOD team subsequently had a memorial plaque to his honour engraved and erected on the site which will soon be entirely reclaimed by nature, leaving nothing to mark what had once happened there.

So ended one of the recent tasks completed by the Royal Air Force EOD Operations Flight, not typical perhaps, but one amongst the 130 call-outs which the unit receives on average each year. Within a short time of the Fernhurst task, other aircraft excavation projects revealed yet more work for the Wittering EOD Flight. At Deeping St James, a 50kg bomb in a Junkers Ju 88 wreck was detonated in situ, and later a scare on a Dornier Do 217 excavation at Runwell Hospital in Essex turned out to be nothing more lethal than one of the main-wheel tyres.

Still later, another 50kg bomb was found in the wreckage of a Junkers Ju 88 in the dried-out bed of Swanbourne Lake, Arundel, where it had crashed on August 13, 1940. This bomb, found on November 3, 1989, was detonated on site shortly before

Subsequently the RAF re-examined the area and found more bombs on the bank — right beside the public footpath in everyday use.



During the war all UXBs were given one of four priorities in relation to their effect on the war effort. Priority 'A' for those bombs for which the immediate disposal was essential to the war effort. Priority 'B' was for the rapid disposal of bombs which were important but less urgent than 'A'. Priority 'C' was for those bombs not necessarily calling for immediate action, and 'D' for those bombs which could be left to be dealt with at leisure. Many bombs in the latter category, particularly in remote areas, were abandoned for the duration of the war. At the end of the war a review of all these bombs was carried out and the Home Office was told in August 1945 that of the 1,400-odd UXBs recorded, 458 had been permanently abandoned. It was reported that the Regional Officers had supplied records of abandoned bombs to local authorities who were directed to maintain a register, open to enquirers, on their location. This is the location of one bomb reported during the war to the RAF but subsequently abandoned — we purposely refrain from identifying the spot to avoid worrying anyone travelling along this particular road!



On this spot at Beer in Devon on the night of March 27/28, 1944, a Ju 88 of 9/KG6 came to grief after having been shot down by a 456 Squadron Mosquito. This was another of the possible UXB situations which we passed on to Wing Commander Hopkins

for investigation, and he reconnoitred the spot in February 1990. The RAF went in during the week of March 12 and sure enough an SC 500 was uncovered not very far beneath the surface.

midnight the same day. Without doubt it was the largest 'banger' at any of the many firework parties being held in Sussex that weekend. This job was carried out by Royal Engineers of 33 Engineer Regiment (EOD) from Chattenden, Kent, they having been initially tasked to the site. A subsequent survey of the site carried out by the Royal Air Force EOD Operations Flight found a number of other bombs including one further 50kg and two 250kg. These were all dealt with in a manner similar to those at Fernhurst.

Thus, in a year which marked the 50th anniversary of both the outbreak of war and the formation of the Royal Air Force Bomb Disposal organisation there have been ample illustrations that there still remains a continuing need for specialised EOD teams. These teams, from the Royal Air Force and the other Services, have the apparently unending task of dealing with unexploded ordnance left over from past conflicts and training exercises quite apart from a continuing requirement for EOD forces to support their respective Services in their National Defence rôle.



Flight Lieutenant Tim Coslett, OC EOD Ops Flight (left), and Sergeant Bob Richards take a closer look.



The fuzes were immunised by injecting a salt solution through the plastic tubes before the bomb was set up over a pit for



trepanning and steaming out. The hessian ensures that the water drains away, letting the explosive solidify for burning.

During my secondary schooling in Australia I was given a photograph of Field-Marshal Erwin Rommel. It was presented to me by my geography teacher who no doubt noticed my interest in the Second World War, rather than the more mundane subject matter at hand. The photograph had been acquired by my teacher's uncle, an infantryman of the 9th Australian Division. However, it was not until September 1989 that I had the opportunity of visiting Egypt and, in particular, El Alamein.

In 1942, as Rommel's forces in North Africa pushed eastwards, they were halted at El Alamein. By June 1942, Rommel had pursued the British Eighth Army from Tobruk to Mersa Matruh and, after that battle, the Eighth Army pulled back to the Alamein line. This defensive position was well chosen, providing good observation across the open plain on which the panzers would attack, combined with a narrow front with flanks that could not be turned.

The first attempt to smash through the El Alamein defences came during the afternoon of June 30. Rommel's panzers numbered a mere 55 yet he was impatient to move further east. His weary troops came up against determined resistance for the British, Indian and Commonwealth troops knew that Alamein was their last stronghold position west of the Nile. Rommel's frontal assault failed and the Axis advance ground to a halt and on July 17 Rommel began to take defensive measures. However, an Allied counter-attack (under the command of General Claude Auchinleck) launched on the 21st, proved unsuccessful. The first battle of El Alamein was over.

On August 5, 1942, Winston Churchill visited Egypt and two days later appointed a new commander of the Eighth Army, Lieutenant-General Bernard Montgomery. Churchill was anxious for a desert victory over Rommel. The Anglo-American 'Torch'



EL ALAMEIN '89

By David M. Green



Today the North African wastes have all succumbed to the scrap drives of the post-war years and visitors to the desert, like David Green, come back somewhat disappointed at not finding relics of the battles still in situ. Back in 1950 our reader Stan Fennell took these snaps of a group of 14 Matildas lying wrecked north-east of El Adem. 'It was a most moving moment to be alone at the site as the sun went down,' wrote Stan to us in 1978, 'the DR vehicles going on and leaving me there. They thought I was after loot of some kind, I believe! Just the wind sighing through the apertures, all turrets turned south the same way as at the moment of destruction, as if time had stood

still. I clambered up on them. In one, the debris at the bottom of the hull contained many shells, dented but intact, and a long hollow bone I believed to be a leg bone, bleached then, but probably blackened at the time, and unnoticed by the burial parties, if any. I had myself had experience of seeing Pioneers in other lands using rakes and suchlike to recover crews from tanks after battle. Shortly after sundown I was picked up and we bumped away over the ridges, feeling very humble, in my case anyway, at the sacrifice so many made in these under-gunned, slow vehicles, their two-pounders no more than pop guns. What a waste.'



landings of Tunisia and Algeria were to be launched in early November and victory in Egypt would be a tremendous boost to morale in Britain. It would also impress Stalin, whom Churchill was soon to meet.

Failing to break through the Allied defensive line in July, Rommel tried again on August 31 by attacking Alam el Halfa. However, forewarned by Ultra intelligence sources, Montgomery was ready for the attack and Rommel's last major offensive failed. The Eighth Army could now prepare to go on the offensive against the Panzer-armee Afrika.

The British attack began at 9.40 p.m. on October 23. The Allied forces had an overwhelming numerical superiority in manpower, artillery, aircraft and tanks. Employed for the first time were 252 of the new American-built M4 Sherman tanks in a collective force of 1,100 tanks against the 500 that the Germans and Italians could muster for battle. Air dominance belonged to the British and Allied aircraft roamed the skies freely. Severely hindering the Axis forces was an acute fuel shortage coupled with low morale in the wake of Rommel's (illness-enforced) departure to Germany.

The relatively lightly defended Axis line held back the initial onslaught as the tightly massed Allied forces fell prey to well emplaced and directed anti-tank and artillery fire. Montgomery's offensive was virtually halted in the first 48 hours.

Rommel returned to the front on October 25. Inconclusive fighting continued and Montgomery planned an all out assault, massing all available forces into Operation 'Supercharge'. Meanwhile the Axis supply situation was critical and the sinking of two tankers destined for Tobruk came as a bitter blow to Rommel.

'Supercharge' was launched at 1.00 a.m. on November 2. Desperate fighting ensued with heavy Allied casualties. The operation failed in reaching its initial objectives, but the Panzerarmee had begun to withdraw. Rommel was pitted against overwhelming Allied opposition and a lack of reinforcements, plus the supply problem, posed little option but to retreat. The intervention of Hitler and his order to hold at Alamein at all costs allowed the Allied forces to break through the Axis line. Rommel's retreat had begun. On November 8, Allied troops landed in French North Africa leading to the eventual surrender of all Axis forces on the continent of Africa in the following May.

The famous coastal road which runs all the way from Alexandria to Tunis. This view looking west was taken by long-time ATB reader Roy Cooke in November 1978. Roy commented that 'in June 1942 El Alamein was simply marked on the map as a wayside railway halt on the Western Desert Railway that ran originally from Alexandria to El Daba before it was extended to Mersa Matruh in 1936. Many of these small railway halts became famous in 1942, and from Alexandria they read: El Amriya; El Hammam; El Imayid; El Alamein; Tel el Eisa; Sidi Abd el Rahman; Ghazal; El Daba; Fuka; Similla; Mersa Matruh. The New Zealanders extended this line in 1941-42 from Mersa Matruh over the Libyan frontier as far as the port of Tobruk, and indeed the Afrika Korps made use of this line and even extended it towards Tobruk whilst they were at Alamein. There was a frontier station at Fort Capuzzo, but the line was closed to all traffic beyond Sollum, at the frontier with Libya, on December 20, 1946, and the Libyan portion was removed.'

Today El Alamein is a small dusty village, a bus stop between Alexandria and Mersa Matruh. Out of the featureless desert a number of new coastal resorts are emerging and the scars of war have all but healed.

I was particularly interested in locating any relics of the great battles that had raged across the desert. Unfortunately 'Pharaoh's revenge' had reared its ugly head and I was very nearly rendered out of action by intestinal infection. This would limit the scope of my investigations and, with the constant heat, I was not terribly inspired to leave my air conditioned room.

My illness, and the peculiar manner in which most Egyptians drive, was more than enough persuasion for me to hire a car with

driver for the journey to El Alamein. Being a Westerner was the excuse needed for the driver to play some of his favourite music as we travelled and an aural bombardment of Frank Sinatra was to follow!

Whilst hurtling along the coastal road I began to appreciate the featureless nature of the desert around me. The rusting hulks of tanks and assorted equipment which I had imagined to litter the desert were conspicuously absent. Questioning both my driver and Egyptian military authorities, I was told of the 'field of bombs' lying to the south of El Alamein, an area restricted to all, with which order my driver complied. I wished then that I was travelling alone, free to wander off the beaten track.



Springbok Road was originally a desert track that left the coast road at right angles past El Alamein station and headed for Qaret el Himeimat (or Mount Himeimat). Roy Cooke's view (above) shows it now tarmaced with a level crossing at the station.

I had heard of a collective assortment of military vehicles displayed at Alamein and these I found at the war museum. Outside lie a variety of Axis and Allied transport and armour but it was disappointing not to find a single German panzer. However, not to be outdone, the Egyptian curators had labelled most exhibits as being of German origin! A British Crusader tank was now a German panzer, similarly an American half-track now became a vehicle of the Afrika Korps. Two vacant display positions led one to wonder what might have previously been displayed there.

The British War Cemetery is located east of El Alamein. Here lie 7,367 Allied Servicemen from such diverse origins as Britain, Australia, South Africa, New Zealand, Greece, France, India, and the Pacific Islands. Outside is erected a memorial to the 9th Australian Division.

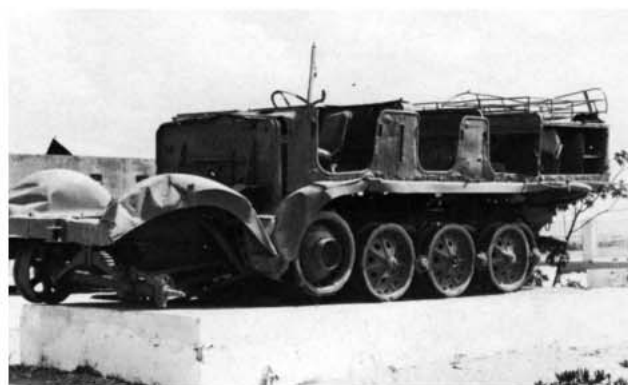
The German and Italian War Cemeteries lie west of the town. The Arab gatekeepers to the German memorial offer for sale rusting pieces of militaria but I was firmly told by the Arabs to refrain from photographing the items for fear of repercussions from insulted German visitors.



'Consul' armoured sentry boxes outside the war museum at El Alamein.



All vehicles are painted the same desert sand colour. This British cruiser tank Mk IV Crusader is labelled a 'German panzer'!



Left and above: This is German — an 8-ton Zgkw.SdKfz. 7 manufactured by Krauss-Maffei.



British Humber armoured car.



British light tank Mk VIA.



Left: American M2 White half-track described as a 'German transport vehicle'. *Right:* No description at all on this German PaK.



Italian Semovente M40 (SP 75/18 assault gun).



US medium tank M3 Grant.



SdKfz. 135/1 — a mod of the French tracteur blindé Lorraine.



German howitzer 15cm sFH18.

About six kilometres west of El Alamein is a marker indicating the furthest point of the Axis drive eastward stating that Alexandria is 111 kilometres away. Continuing west along the coastal road I came next to Mersa Matruh. The journey to and around the actual town showed no signs of earlier conflict. (This was in marked contrast to an earlier trip to the Sinai where many Soviet and American-made tanks lie abandoned along the roadside from post Second World War confrontations.)

Mersa Matruh is situated on the Mediterranean coast and a peninsula swings round east of the town. Hiring a donkey cart and felucca, I journeyed across to Rommel's Isle. Here one can swim at Rommel's beach (as did the Field-Marshal, claim the locals) and then visit the Rommel Museum. In a series of caves, where it is claimed he once had his HQ, is now a small collection of maps and equipment. Rommel's leather greatcoat, donated by his son, is displayed, as is a bust of the Desert Fox.

Previously I had read of a wrecked U-Boat in the sea just off Rommel's Isle, but I was unsuccessful in locating it or indeed obtaining any information of it from local sources.

Mersa Matruh is close to the Libyan border and therefore a sensitive military area. Much of the country I had intended to visit is now occupied by modern military



Six kilometres further along the desert highway towards Mersa Matruh, the Italians have erected a stone marker which reads: 'Manco la Fortuna — non il Valore. 1.7.1942' with an arrow pointing in the direction of Alexandria: 'Alessandria 111' or in English: 'Good Fortune was lacking — not bravery. 1st July 1942; Alexandria 111 km.' In 1989 David Green pictured the marker indicating the limit of the Axis advance.



A hundred miles west of El Alamein lies Mersa Matruh — the location of the Rommel Museum.



Left: The museum is located on what is known locally as 'Rommel's Isle' although this is not a true island but the name for the peninsula of land east of the town. To save a roundabout journey by road, a short cut can be made from this beach by felucca across to the isle in the right background. Right: This building was erected over the entrance to the cave where Rommel is said to have had his headquarters. However, when



the museum was being planned in 1977, one of Egypt's leading historians, Major-General Hassan of the Nasser Military Academy in Cairo, disagreed with the accreditation of the cave to Rommel as he claimed to have seen it after the German retreat and the cave was then an 88mm gun emplacement. 'Although the Bedouin say he was there,' said Hassan, 'personally I do not think Rommel would ever have been near it!'



Left: In December 1977, Herr Manfred Rommel, the Mayor of Stuttgart, left, was pictured handing over mementoes of his father to Mr Farid el Kady of the Egyptian Tourist Office. **Above right:** The coat now displayed at Mersa Matruh.

installations and jet fighters scream across skies once patrolled by Hurricanes and marauding Messerschmitts. In my short excursion to these battlefields I came to better understand the conditions under which the opposing armies had fought. I saw the few reminders of the campaign to be found today while in my pocket was the original photograph from my schooldays which led me there in the first place.

Captioning is poor. Right: Here David Green examines 'an Afrika Korps battle flag' while in his pocket he carries the faded snapshot (below) which first aroused his interest in Rommel during his schooldays in Australia.



